

Compartment Review Presentation

Gladwin Forest Management Unit

Compartment 73068
Entry Year 2019
Acreage: 3,787
County Gladwin

Management Area: Gladwin Lake Plain

Revision Date: 2017-05-26

Stand Examiner: Steve Nyhoff

Legal Description:

T19N R02E Section 32-35 T18N R02E Section 2-11

Identified Planning Goals:

Vegetation management in the Gladwin Lake Plain management area (MA) (Figure 4.32.1) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character including the Rifle River, a designated natural river; the Lame Duck Foot Access Area, a high conservation value area; several wildlife area floodings; threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management for this 10-year planning period will focus on balancing the age-class distributions for aspen and red pine. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunities. Expected trends in this 10-year planning period will be the continued need to address illegal off-road vehicle use, trash dumping and increased recreational pressure.

Soil and topography:

The terrain is generally flat with very little relief except along the Molasses River, Fish Creek, and the marsh system along the east side of the compartment. Much of the central portion of the compartment is hummocky.

The soils are made up of well drained Rubicon, Grayling, and Croswell Associations (40%). There is also somewhat poorly drained AuGres Associations (35%) and poorly drained Roscommon, Evart-Winterfield, and losco Associations (25%). Most of the well-drained soils are along the northeast and northwest sides of the compartment. The central portion is a mix of somewhat poorly drained and poorly drained soils.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

The compartment is a contiguous block of State Ownership with a few inholdings along the south side. The private lands are mainly recreational properties. However, there is a sub-division on the west side in T19N, R2E, section 32. This area has seasonal and permanent residences.

Unique Natural Features:

There are MNFI hits in the compartment. The Molasses River has records of the Ellipse mussel. Also to the southeast of the compartment there is a record of a Bald Eagle. There are no other records and no species were found during the inventory process.

Archeological, Historical, and Cultural Features:

There is a HAL hit in the south west end of the compartment.

Special Management Designations or Considerations:

There are no special designations in the compartment.

Watershed and Fisheries Considerations:

The compartment's west boundary is the Molasses River. Also, the headwaters of Fish Creek are in the central portion of the compartment. Both waterways are warm water fisheries.

Wildlife Habitat Considerations:

Wildlife Habitat Considerations: Compartment #68. This compartment includes many wetland and lowland type systems associated with the Molasses River drainage. These wetlands are components of a larger wetland complex that drains through the Molasses River Flooding #3. The majority of this compartment is lowland systems. This wetland complex is a unique habitat type and is being considered for a special designation. Non-wetland stands are comprised mainly of Oak, Jack Pine and mixed lowland conifer, making it suitable for a number of wildlife species. Waterfowl and shore birds can be found using the many wetland areas in this compartment. Furbearers including beaver, mink, muskrat, black bear, bobcat,

and coyote use the wetlands and lowlands as corridors and year-round habitat. Game species likely to be present in this compartment include wood duck, mallard, wild turkey, ruffed grouse, snowshoe hare, and white-tailed deer. The compartment is easily accessible to hunters M-61.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the Glacial Drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw formation is used for clay/shale in other areas of the State. This compartment's main mineral potential is for sand and gravel, but the potential for development is considered limited. This area has had little oil and gas activity. North Buckeye Fields is located to the west. The field, discovered in 1936. Has produced over 21 MBO from the Devonian Dundee formation. There are no current State oil and gas leases in the compartment.

Vehicle Access:

M-61 makes up the southern boundary of the compartment, Center Fireline as well as the ORV Trail and route are in the eastern and northern portions of the compartment. Wildwood road and a portion of the closed ORV route is in the western portion of the compartment. There are portions of the closed route which can be driven from the north and south. Therefore, the edges have good access but the central portion of the compartment has poor access.

Survey Needs:

No surveys are needed at the current time.

Recreational Facilities and Opportunities:

The Gladwin ORV trail runs in the eastern portion of the compartment, the Gladwin ORV Route in the north end. The MCCCT trail is also in the east side of the compartment. Lastly the Midland to Mackinac BS trail is in the west side of the compartment.

Besides the established trails the area is also used heavily by hunters.

Also, the Molasses River and Fish Creek run through the compartment which yield limited fishing opportunities. The area is also used by dispersed camping and hunting.

Fire Protection:

The area has some urban interface but it is limited to mainly hunting cabins. There are areas of thick jack pine scattered in the compartment. Overall, the access is fair except for the central portion of the compartment. Fire would be carried mainly by blueberry and grasses. The overall, fire occurrence is low for this area.

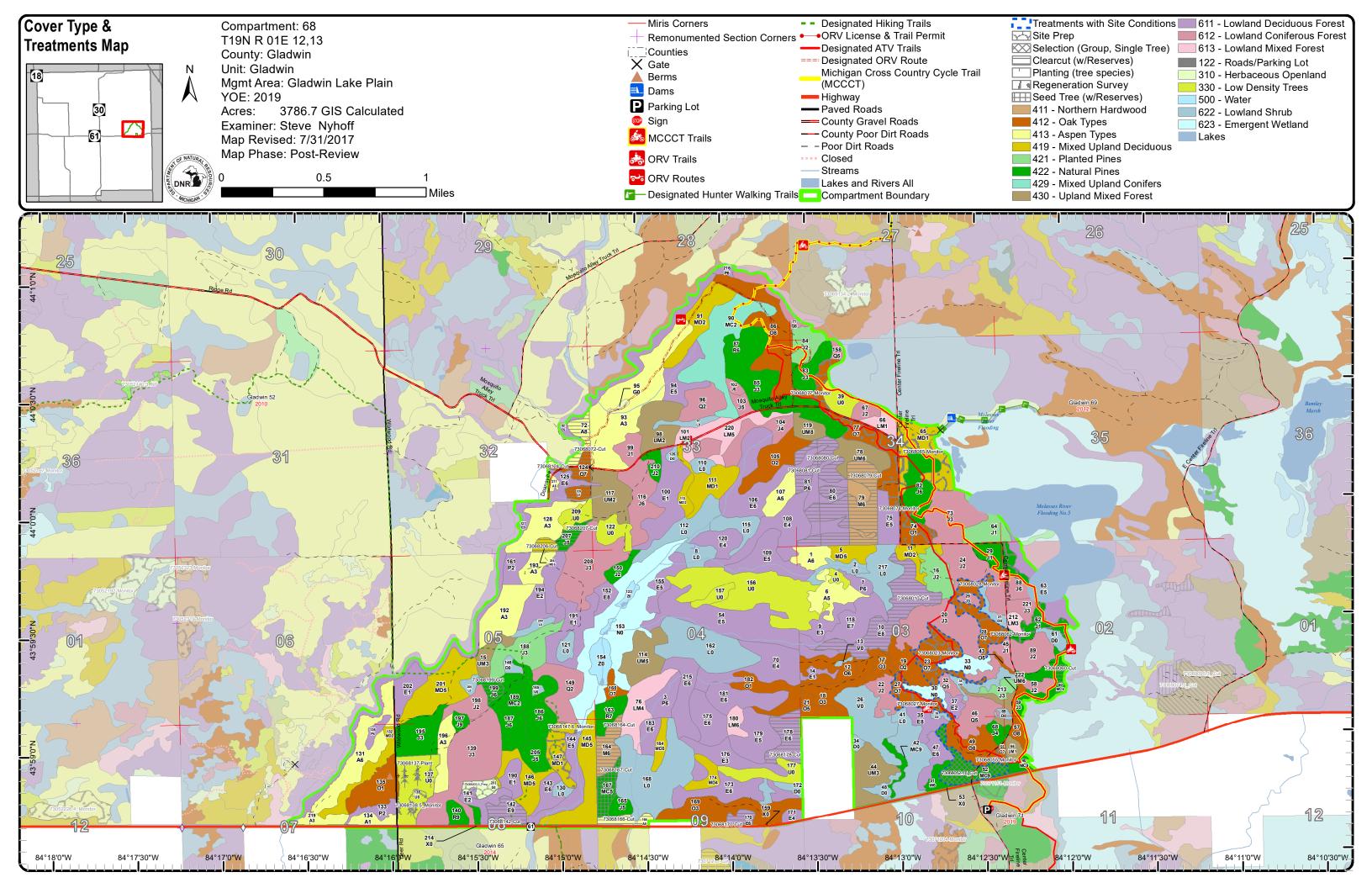
Additional Compartment Information:

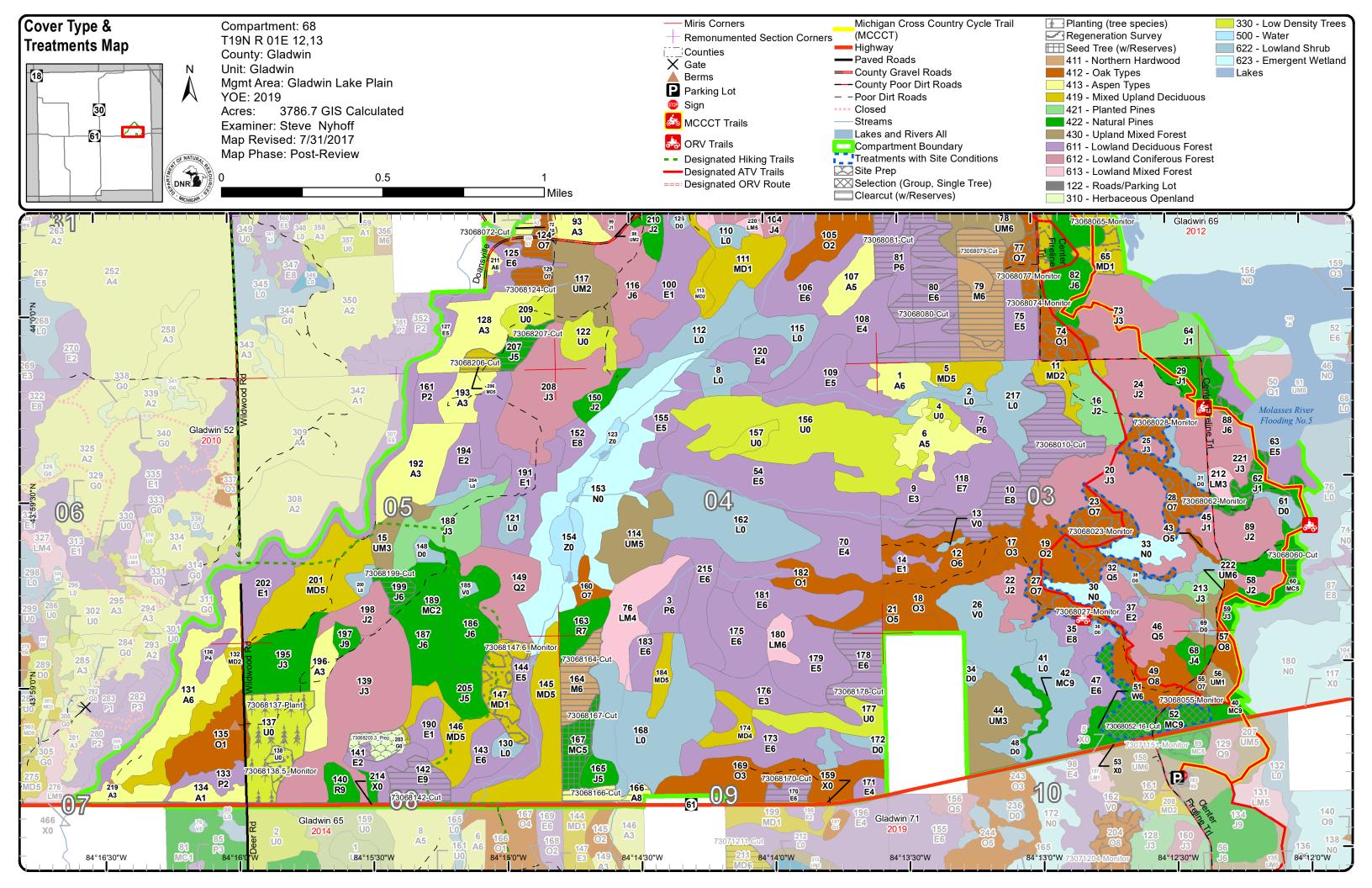
The following reports from the Inventory are attached:

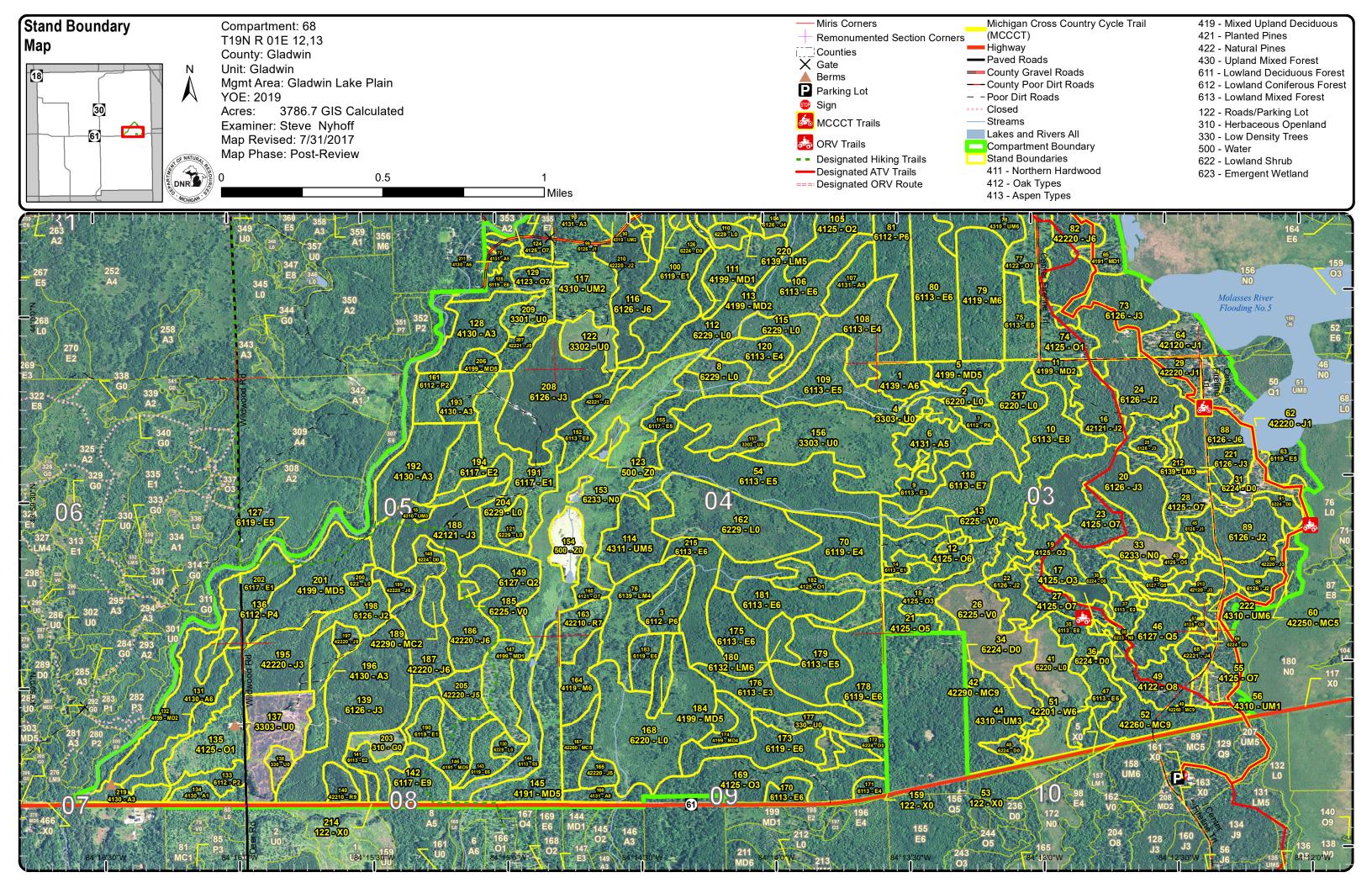
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

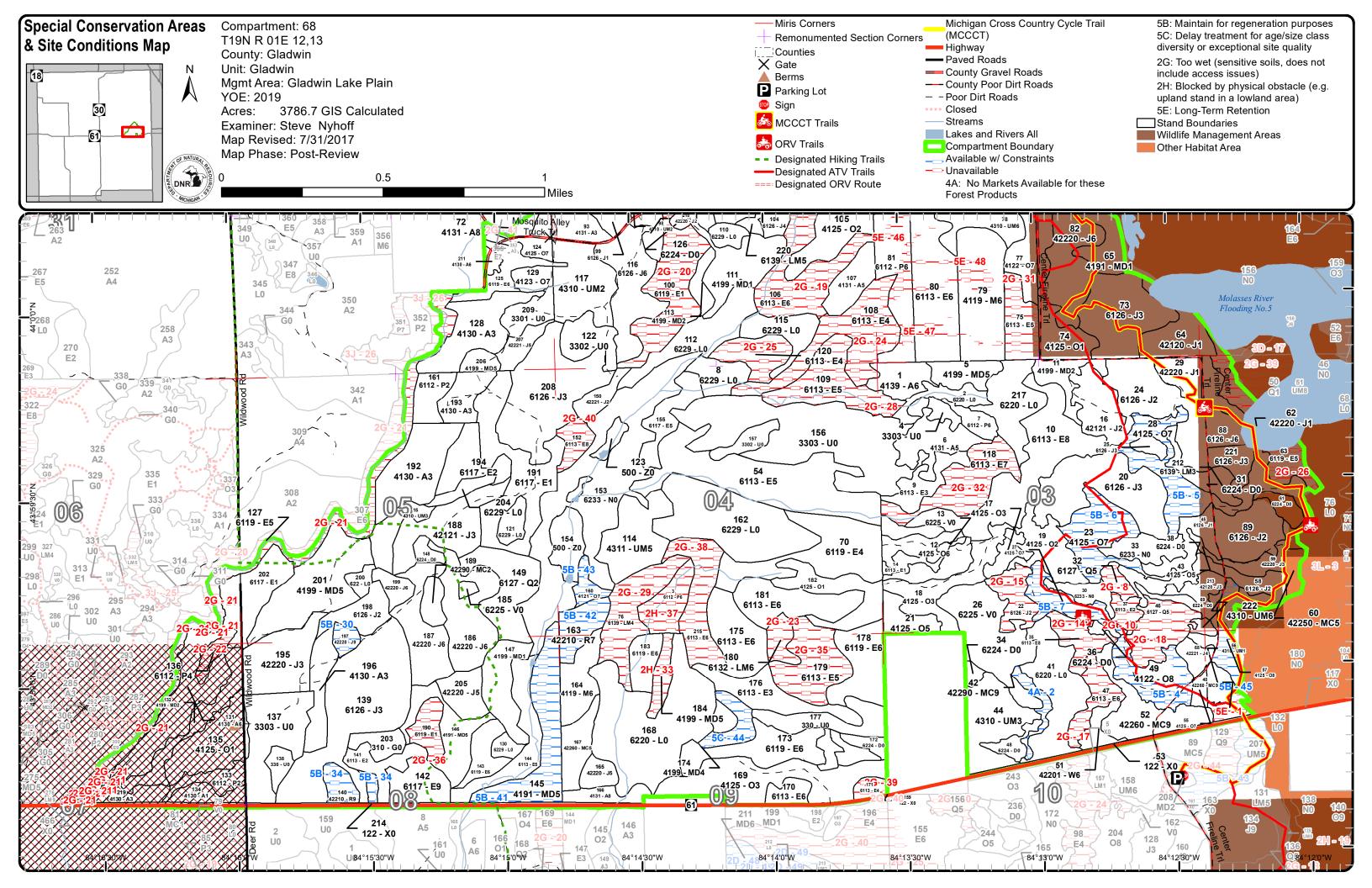
The following information is displayed, where pertinent, on the attached compartment maps:

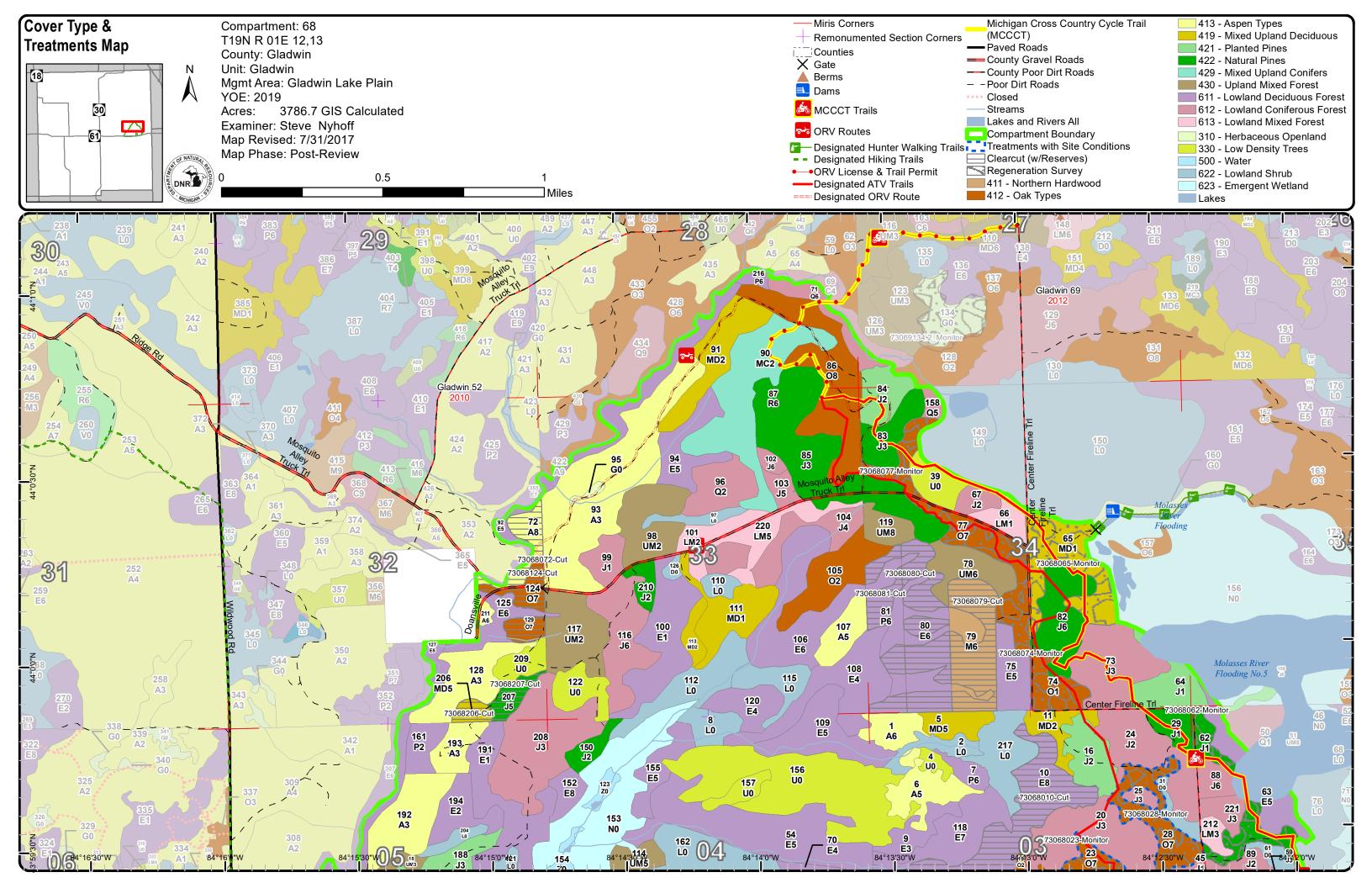
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

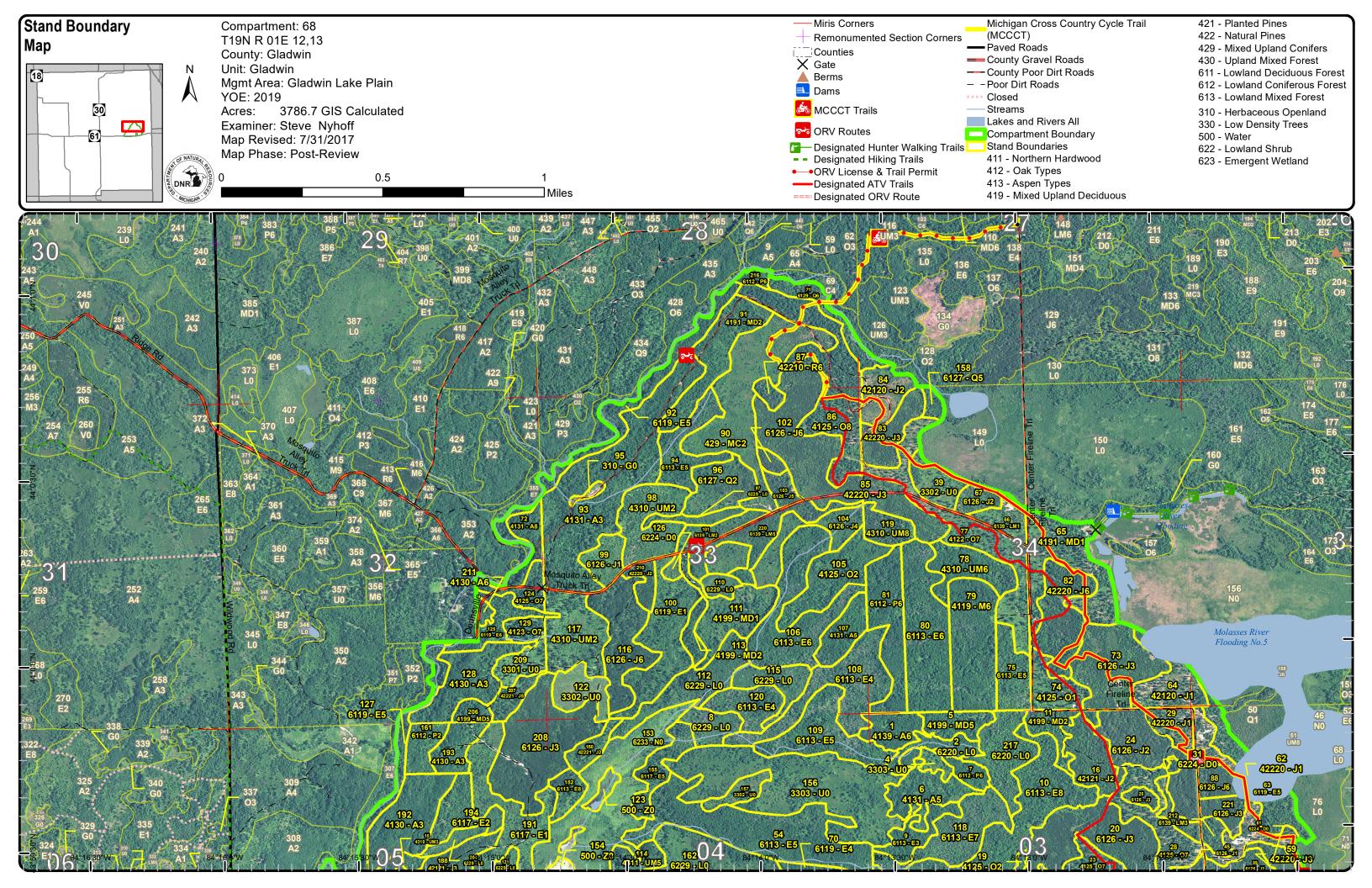


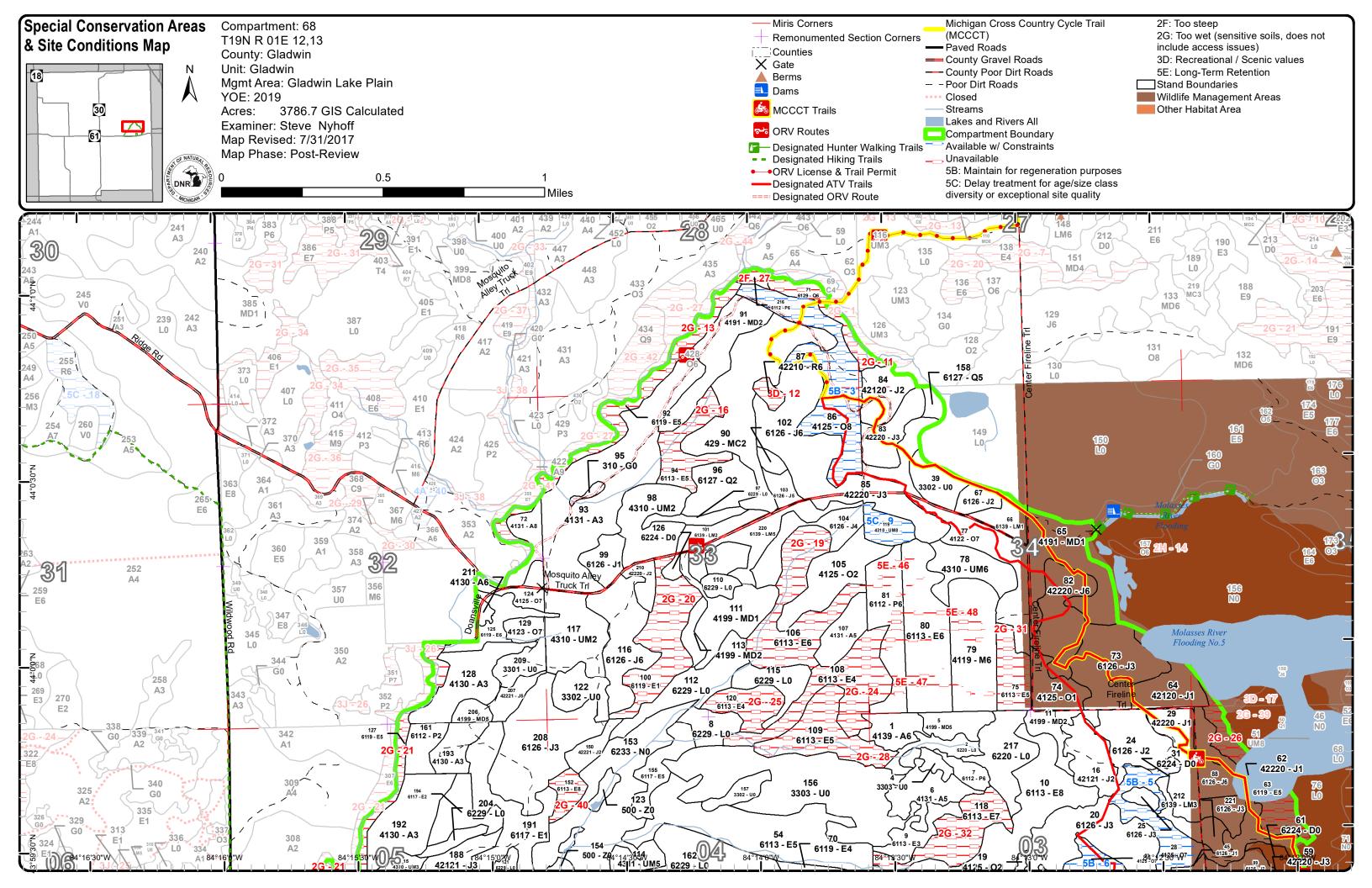












Compartment 68 Year of Entry 2019

Gladwin Mgt. Unit Steve Nyhoff: Examiner



Age Class

| | | | | | | , | , | , | | | | , | | , | | | | , | , , |
|-----------------------------|-----|------|-----|-----|-----|-------|----|-------------|----|--------------------------|----|------------|------|----|---|---|---------|--------|---------|
| | Ag. | Ko S | | | | 8 / 6 | | , } \ | | / \$ ² /\$ | | \$ \ \& | 20 Z | | | | , the / | Dr Jug | No. No. |
| Aspen | 0 | 7 | 35 | 132 | 81 | 0 | 0 | 0 | 7 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 273 |
| Bog | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| Herbaceous Openland | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Jack Pine | 0 | 53 | 159 | 323 | 168 | 27 | 7 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 746 |
| Low-Density Trees | 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 172 |
| Lowland Aspen/Balsam Poplar | 0 | 0 | 0 | 17 | 14 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| Lowland Conifers | 0 | 0 | 0 | 25 | 23 | 19 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 82 |
| Lowland Deciduous | 0 | 0 | 59 | 64 | 30 | 191 | 48 | 0 | 36 | 185 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 262 | 885 |
| Lowland Mixed Forest | 0 | 9 | 0 | 5 | 29 | 26 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| Lowland Shrub | 253 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 253 |
| Marsh | 102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 |
| Mixed Upland Deciduous | 0 | 36 | 25 | 29 | 112 | 0 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 255 |
| Natural Mixed Pines | 0 | 0 | 6 | 0 | 0 | 12 | 0 | 0 | 5 | 5 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| Northern Hardwood | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| Oak | 0 | 58 | 40 | 29 | 70 | 0 | 0 | 0 | 0 | 110 | 85 | 3 | 0 | 0 | 0 | 0 | 0 | 6 | 400 |
| Red Pine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 25 |
| Treed Bog | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| Upland Conifers | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| Upland Mixed Forest | 0 | 5 | 53 | 37 | 7 | 26 | 18 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 155 |
| Urban | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| Water | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| White Pine | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 656 | 168 | 430 | 661 | 534 | 400 | 73 | 0 | 48 | 410 | 85 | 41 | 4 | 12 | 0 | 0 | 0 | 273 | 3790 |



Report 2 – Treatment Summary

Gladwin Mgt. Unit Year of Entry: 2019

Acres of Harvest

Compartment 68
Total Compartment Acres: 3,787

Commercial Harvest - 248
Harvests with Site Condition - 21
Next Step Harvest - 133
Habitat Cut - 133

Cover Type by Harvest Method

| | | / | 177 July 1 | TO HOUSE OF THE PERSON OF THE | #DJ690 (6 | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | DOMONO, | Or in Section 1 | Resource To | 85 | |
|-----------------------------|-------|-----|------------|---|-----------|--|---------|-----------------|-------------|----|-----|
| Aspen | | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| Jack Pine | | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Lowland Aspen/Balsam Poplar | | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| Lowland Deciduous | | 121 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| Mixed Upland Deciduous | | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Natural Mixed Pines | | 5 | 21 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 38 |
| Northern Hardwood | | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| Oak | | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| | Total | 236 | 21 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 269 |

Proposed and Next Step Treatments by Method

| · | | /. | | | Tring of the second | \$ () | | | in i | | No. 10 Post of the contract of | |
|-----------|-------|-----|-----|-----|---------------------|--------|---|-----|--|---|--|---|
| Current | | 269 | 9 | 30 | 0 | 0 | 0 | 224 | 0 | 0 | 532 | ĺ |
| Next Step | | 133 | 204 | 162 | 21 | 0 | 7 | 733 | 0 | 0 | 1259 | |
| | Total | 401 | 213 | 192 | 21 | 0 | 7 | 957 | 0 | 0 | 1791 | |

Next Step

Acceptable oak mixed with red, white, and jack pine.

Regen:

Other Comment:

Proposed Start Date: 10/01/2022

24.1 4125 - Black, N. Pin Sawtimber 28 73068028-94 1-50 Monitoring Natural Regen 412 - Oak Types Two-Aged Draft Field (Intermediate) Boundary Monitor Oak Poor

Site Condition: Shelterwood/Seed Source **Habitat Cut: No**

Prescription Check the stand in 2023 POW. If the regeneration is established and the overstory is commercially viable for harvest, then move the stand to the Specs:

appropriate next step treatment.

Harvest, Clearcut with Retention; Harvest, Clearcut with Retention; SitePrep, Trenching; Planting, Interplant; Monitoring, Artificial Regen(1yr); Next Step

Monitoring, Artificial Regen(3yr) Treatments:

Acceptable Oak mainly mixed with pine, aspen and maple

Regen:

Other Comment:

10/01/2022 **Proposed Start Date:**

| S | | Gla | adwin Mgt. Unit | | Re | port 3 | Treatme | nts | Comparti Year of E | ment: 68 intry: 2019 | DNR |
|--|----------------|-------------|---|----------------------|--------------|--------------|-------------------|---------------------------------|---|-------------------------|-------------------------|
| •• | tment ime | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
| | 8029- nitor | 9.9 | 42220 - Natural Jack Pine | Sapling Poor | 9 | 1-50 | Monitoring | Natural Regen (Intermediate) | 412 - Oak Types | Two-Aged | Draft Field Boundary |
| Habitat Cu Prescription Specs: | Check t | he stand in | Site Condition: n 2023 POW. If the step treatment. | regeneratio | n is esta | ablished a | and the overstor | y is commercially v | iable for harvest, the | en move the : | stand to the |
| Next Step Treatments: | | | with Retention; Hai al Regen(3yr) | vest, Clear | cut with | Retention | n; SitePrep, Tr | renching; Planting, | Interplant; Monito | ring, Artificial | Regen(1yr); |
| Acceptable Regen: | mainly (| oak mixed | with some pine, map | ole and asp | en. | | | | | | |
| Other Comment: | | | | | | | | | | | |
| Proposed St | art Date: | 10/01 | /2022 | | | | | | | | |
| 52 730680 C | 052.16_ Cut | 20.6 | 42260 - Natural Pine, Mixed Deciduous | Sawtimber Well | 102 | 81-110 | Harvest | Single Tree Selection | 42260 - Natural Pine, Mixed Deciduous | Uneven- Aged | Field Boundary |
| Habitat Cu | <u>ıt:</u> No | | Site Condition: | Sheltery | vood/S | Seed So | urce | | | | |
| Prescription Specs: Next Step Treatments: | pine BA | in pine cl | on: In clumps of largumps to 50 (overall reamand) amarack and white o | ed pine BA | in stanc | d is 32; res | sidual will be 20 |). Do not cut any o | | | |
| Acceptable Regen: | | | | | | | | | | | |
| Other Comment: | | and white | ven aged stand with pine, with heavy whi | | | | | | | | |
| Proposed St | art Date: | 10/01 | /2012 | | | | | | | | |
| | 8055- nitor | 2.3 4 | 125 - Black, N. Pin Oak | Sawtimber Poor | 100 | 51-80 | Monitoring | Natural Regen (Re-Inventory) | 4122 - Oak, Pine | Uneven- Aged | Draft Field Boundary |
| Prescription Specs: | <u>ıt:</u> No | | Site Condition: | | | | | | | | |
| Next Step Treatments: | | | | | | | | | | | |
| Acceptable Regen: | A oak a | nd mixed | pine will be acceptab | le. | | | | | | | |
| Other Comment: | Percent | to Treat = | = 100% | | | | | | | | |
| Proposed St | art Date: | 10/02 | /2017 | | | | | | | | |
| 60 730680 | 060-Cut | 4.6 | 42250 - Pine, Oak | Poletimber Medium | 79 | 81-110 | Harvest | Clearcut with Retention | 4319 - Mixed Upland Forest | Even-Aged | Draft Field Boundary |
| Habitat Cu Prescription | | the stand | Site Condition: as a clearcut with re | tention. Th | e retent | tion should | d be individually | marked trees, favo | or the oversized oak | and pine and | d trees having |

<u>Prescription</u> Harvest the stand as a clearcut with retention. The retention should be individually marked trees, favor the oversized oak and pine and trees having

cavities for wildlife. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable mixture of pine, oak, aspen and maple

Regen:

<u>Other</u> Comment:

| Gladwin Mgt. Unit S t a n Treatment Acres Stand Size | | | | | | port 3 | Treatme | nts | Compart Year of E | ment: 68 Entry: 2019 | DNR DNR |
|--|---|--------------|--|--------------------------------|----------------|-------------------|-------------------|---|-----------------------------|-------------------------|---|
| n d | Treatment Name | Acres | Stand CoverType | Size Density | Stand Age | BA Range | Treatment Type | Treatment Method | Cover Type Objective | Age Structure | Approval Status |
| | 73068062- Monitor tat Cut: No ription Monito | 23.0 | 42220 - Natural Jack Pine Site Condition: atural regeneration. | Sapling Poor | 18 | 1-50 | Monitoring | Natural Regen (Re-Inventory) | 4125 - Black, N. Pin Oak | Even-Aged | Draft Field Boundary |
| Specs Next S Treatr | - <u>Step</u> ; Plant | ing, Interpl | ant | | | | | | | | |
| Accep Reger | o <u>table</u> Oak M n: | ixed with ja | ack pine | | | | | | | | |
| Other Comm | nent: | t to Treat | | | | | | | | | |
| 65 | 73068065- Monitor | 35.5 | 4/2017 4191 - Mixed Upland Deciduous with Conifer | Sapling Poor | 6 | 1-50 | Monitoring | Natural Regen (Intermediate) | 412 - Oak Types | Two-Aged | Draft Field Boundary |
| | <u>s:</u> move t <u>Step</u> SitePre | he treatme | Site Condition: in 2020 to see if the reent to the next step. | | | | | | | d is poorly stoo | cked in 2020 |
| Accep Reger | • | oak with s | ome pine, maple and | aspen | | | | | | | |
| Other Comm | nent: | | | | | | | | | | |
| | sed Start Date 73068072-Cut | | 4131 - Aspen, Oak | Sawtimba | . 88 | 51-80 | Harvest | Clearcut with | 413 - Aspen | Even-Aged | Draft Field |
| | | 10.7 | | Medium | 00 | 31-00 | Tiarvest | Retention | 413 - Aspen | Lveil-Ageu | Boundary |
| | | | Site Condition: I as a clearcut with reg gh the stand so when | | | | | | | es for wildlife. | The ORV |
| Next S Treatr | | ring, Natur | al Regen (Re-Invento | ry) | | | | | | | |
| Accep Reger | | aspen mix | with some pine, oak | and maple | | | | | | | |
| Other Comm | nent: | | | | | | | | | | |
| | sed Start Date | _ | 1/2018 | 0 " | | 4.50 | | | 440. O. I. T. | - | - |
| | | the stand i | 4125 - Black, N. Pin Oak Site Condition: In 2020 to see if the reent to the next step. | Sapling Poor egeneration | 6 n is esta | 1-50 blished a | Monitoring | Natural Regen (Intermediate) rate or better stock | 412 - Oak Types | ŭ | Draft Field Boundary cked in 2020 |

SitePrep, Trenching; Planting, Interplant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Oak mainly mixed with pine, maple and aspen

10/01/2018

Next Step

Treatments:

Proposed Start Date:

Regen:
Other
Comment:

Specs:

Next Step ; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable red maple mixed with oak, pine, cedar, and aspen

Regen:

Because of the areas that are too wet to harvest the harvest acres may be significantly less than inventory acres.

Other Comment:

Proposed Start Date: 10/01/2018

73068081-Cut 6112 - Lowland Poletimber 43 16.7 51-80 Clearcut with 6112 - Lowland Draft Field Harvest Even-Aged Aspen Well Retention Aspen Boundary

Habitat Cut: No Site Condition:

Harvest the stand as a clearcut with retention. There are portions of the stand that are too wet to harvest that should be painted out. These areas will Prescription act as retention. Harvesting some of the prescribed acreage will require the used of crane mats and/or corduroy to minimize rutting problems. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory) Treatments:

Acceptable Aspen mixed with maple and oak

Regen:

Other Because of the areas that are too wet to harvest the harvest acres may be significantly less than inventory acres.

Comment:

Gladwin Mgt. Unit Report 3 -- Treatments Compartment: 68 s Year of Entry: 2019 а Approval **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** n Age Method Objective Name **Density** Structure Status d CoverType Age Range Type 73068124-Cut 124 13.8 4125 - Black, N. Pin Sawtimber 81 1-50 Harvest Clearcut with 412 - Oak Types Two-Aged Draft Field Oak Poor Retention Boundary **Habitat Cut: No Site Condition:** Prescription Harvest the stand as a clearcut with retention. The retention should be individually marked trees in groups or singularly. They should not exceed 2 trees/acre on average. Favor the retention of white oak and conifers. The ORV Route goes through the stand so when setting up the sale include Specs: the appropriate trail spec in the sale. Next Step Monitoring, Natural Regen (Re-Inventory); SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Treatments: Regen(3yr) Acceptable Oak mixed with some aspen, conifer, and maple. Regen: Other Comment: Proposed Start Date: 10/01/2018 73068137-42110 - Planted 137 30.0 3303 - Mixed Low Nonstocked Unspec **Planting** Initial Plant Even-Aged Draft Field **Plant Density Trees** ified Red Pine Boundary **Habitat Cut: No Site Condition:** Prescription Hand plant red pine. Specs: Next Step Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Treatments: Acceptable Planted red pine Regen: Other Comment: Proposed Start Date: 10/01/2017 73068138.5 M Natural Regen 4138 - Aspen Completed -138 330 - Low-Density Nonstocked Unspec Monitorina Even-Aged onitor Trees ified (Intermediate) (OI) Pending Edits **Habitat Cut: No Site Condition:** Prescription Check regeneration at TCR plus 4 years. Specs: Next Step Treatments: Acceptable Medium to fully stocked stand is acceptable. Other Percent to Treat = 100% Comment:

Regen:

Proposed Start Date: 09/12/2018

142 73068142-Cut 13.8 6117 - Lowland Sawtimber 89 81-110 Harvest Clearcut with 611 - Lowland Even-Aged Draft Field Deciduous, Mixed Retention Deciduous Well Boundary Coniferous Forest

Site Condition:

Prescription Harvest the stand as a clear cut with retention. Retain some marked oaks and red pines. However, do not exceed 5% by BA. The marked trees Specs: should be far enough back so they will not fall into M-61. There are some very wet areas in the stand that may need to be painted out. The Midland

to Mackinac hiking trail goes through the stand so include the appropriate cutting spec. to protect the trail and marker.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Habitat Cut: No

<u>Acceptable</u> mainly red maple mixed with some oak, birch, and pine.

Regen: Other

There are areas in the stand that are too wet to harvest. Because of this the harvest acres will be significantly less than the inventory acres.

Comment:

Deciduous

Habitat Cut: No Site Condition:

Acceptable red pine mixed with oak, aspen, and maple

Harvest the stand as a seed tree harvest. Cut all the aspen and jack pine and retain 10-20 BA of red pines and swamp hardwoods that are wind firm. These should be kept in patches. In addition, all the branch material should be left on site to increase the seed source to regenerate the stand. If the Specs:

stand does not regenerate to a moderate or better stocking. Then interplant the stand with pine.

Next Step Monitoring, Natural Regen (Intermediate); SitePrep, Trenching; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Treatments:

Prescription

Regen:

Other

Comment:

Regen:

Other If the stand does not regenerate, then seed the stand with jack pine during winter.

Comment:

Proposed Start Date: 10/01/2018

199 73068199-Cut 5.8 42220 - Natural Poletimber 86 111-Harvest Clearcut with 429 - Mixed Draft Field Even-Aged Well 140 Retention **Upland Conifers** Boundary

Jack Pine

Site Condition:

Prescription Harvest the stand as a clear cut with retention. The retention should be red pines and some marked jack pines not to exceed 5% of the total BA.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Habitat Cut: No

Acceptable Mixture of jack pine, red pine with some oak and aspen

Regen:

Other Comment:

Proposed Start Date:

10/01/2018

Gladwin Mgt. Unit Report 3 -- Treatments Compartment: 68 s Year of Entry: 2019 а **Treatment** Acres Stand Size Stand BA **Treatment Treatment Cover Type** Age Approval n Method Objective Status Name CoverType Density Age Structure d Range **Type** 4191 - Mixed 4211 - Planted Draft Field 146 73068203.3 P 9.0 Poletimber 33 1-50 SitePrep Trenching Even-Aged **Upland Deciduous** Red Pine Boundary Medium rep with Conifer **Site Condition: Habitat Cut: No** Prescription C73-870 Specs: ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step **Treatments:** Acceptable Planted red pine fully stocked is acceptable regeneration. Regen: **Other** Percent to Treat = 100% Comment: **Proposed Start Date:** 02/02/2015 73068206-Cut 4.6 4199 - Other Mixed Poletimber 55 51-80 Harvest Clearcut with 4199 - Other Even-Aged Draft Field **Upland Deciduous** Medium Retention Mixed Upland Boundary Deciduous **Habitat Cut: No Site Condition:** Harvest the stand as a clearcut with retention. The retention should be individually marked trees in groups or singularly. They should not exceed 2 Prescription trees/acre on average. Favor the retention of white oak and conifers. Specs: Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable a mix of upland deciduous tree heavy to oak and maple with some conifers. Regen:

Other There are several low wet areas in the stand, so restrict the harvest to dry or frozen conditions.

Comment:

10/01/2018 **Proposed Start Date:**

207 73068207-Cut 7.0 42221 - Natural Poletimber 55 51-80 Clearcut with 4222 - Natural Even-Aged Draft Field Harvest Jack Pine, Mixed Medium Retention Jack Pine Boundary

Deciduous

Habitat Cut: No Site Condition:

Prescription Harvest the stand as a clearcut with retention. The retention should be in patches and not exceed 5% of the area. In addition, the branch material Specs: should be left to supply seed for regeneration. The stand is wet so it must be harvested during dry or frozen conditions.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable jack pine mixed with other conifer and oak

Regen:

Other Comment:

Proposed Start Date: 10/01/2018

Total Treatment 532.1 **Acreage Proposed:**

Compartment: 68

Gladwin Mgt. Unit

Steve Nyhoff: Examiner Year of Entry: 2019

| Availa | ibility for | Managemer | nt | | | | | | | | | |
|--------|-------------|----------------|---------------|-----------------------------|-------|---------|-----|--------|-----|----|----|----|
| Total | Acres | Acres Avail | Acres | D | omina | nt Site | Con | dition | s | | | |
| Acres | Available | With Condition | Not Available | | 4A | 5B | 5C | 2F | 2G | 2H | 3D | 5E |
| 273 | 273 | 0 | 0 | Aspen | | | | | 0 | | | |
| 38 | 38 | 0 | 0 | Bog | | | | | | | | |
| 9 | 9 | 0 | 0 | Herbaceous Openland | | | | | | | | |
| 747 | 730 | 4 | 12 | Jack Pine | | 4 | | | 12 | | | |
| 172 | 172 | 0 | 0 | Low-Density Trees | | | | | | | | |
| 72 | 40 | 0 | 31 | Lowland Aspen/Balsam Poplar | | | | 3 | 5 | 13 | | 10 |
| 81 | 47 | 0 | 35 | Lowland Conifers | | | | | 35 | | | |
| 884 | 478 | 0 | 407 | Lowland Deciduous | | | | | 397 | | | 10 |
| 75 | 42 | 0 | 32 | Lowland Mixed Forest | | | | | 32 | | | |
| 253 | 253 | 0 | 0 | Lowland Shrub | | | | | | | | |
| 101 | 101 | 0 | 0 | Marsh | | | | | | | | |
| 255 | 206 | 42 | 7 | Mixed Upland Deciduous | | 33 | 9 | | | 7 | | |
| 55 | 45 | 5 | 5 | Natural Mixed Pines | 5 | | | | | | | 5 |
| 52 | 45 | 0 | 7 | Northern Hardwood | | | | | | | | 7 |
| 398 | 253 | 144 | 0 | Oak | | 144 | | | 0 | | | |
| 24 | 0 | 21 | 4 | Red Pine | | 21 | | | | | 4 | |
| 43 | 43 | 0 | 0 | Treed Bog | | | | | | | | |
| 53 | 53 | 0 | 0 | Upland Conifers | | | | | | | | |
| 156 | 146 | 9 | 0 | Upland Mixed Forest | | | 9 | | | | | |
| 22 | 22 | 0 | 0 | Urban | | | | | | | | |
| 17 | 17 | 0 | 0 | Water | | | | | | | | |
| 6 | 6 | 0 | 0 | White Pine | | | | | | | | |
| 3,786 | 3,022 | 225 | 539 | Total Forested Acres | 5 | 202 | 18 | 3 | 481 | 20 | 4 | 32 |
| | 80% | 6% | 14% | Relative Percent | | | | | | | | |

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

| Inspecified |
|-------------|
| |
| |
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Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 2 | Available | 4A: No Markets Available for these Forest Products | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
|---|----------------------------------|--|----------|-------------|-------------|-------------|-------------|
| | Comments: | | | | | | |
| 3 | Available | 5B: Maintain for regeneration purposes | 49 | Unspecified | Unspecified | Unspecified | Unspecified |
| | Comments: | | | | | | |
| 4 | Available | 5B: Maintain for regeneration purposes | 16 | Unspecified | Unspecified | Unspecified | Unspecified |
| | Comments: | | | | | | |
| 5 | Available | 5B: Maintain for regeneration purposes | 23 | Unspecified | Unspecified | Unspecified | Unspecified |
| | Comments: | | | | | | |
| 6 | Available | 5B: Maintain for regeneration purposes | 25 | Unspecified | Unspecified | Unspecified | Unspecified |
| | Comments: maintain factor lim | it until regeneration is checked i | in 2023. | | | | |
| 7 | Available | 5B: Maintain for regeneration purposes | 13 | Unspecified | Unspecified | Unspecified | Unspecified |
| | Comments: | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Report 4 | Site | Condit | tions |
|----------|------------------------|--------|-------|
|----------|------------------------|--------|-------|

Compartment: 68 Year of Entry: 2019

| | Steve I | Nyhoff : Examiner | | | | Year of Entry: 20° | 19 |
|----|-------------|--|----|---------------|---|--------------------|-------------|
| 8 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| (| Comments: | | | | | | |
| 9 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 9 | Unspecified | Unspecified | Unspecified | Unspecified |
| | Comments: | | | | | | |
| 10 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| (| Comments: | | | | | | |
| 11 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 12 | 2F: Too steep | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified |
| (| Comments: | | | | | | |
| 12 | Unavailable | 3D: Recreational / Scenic values | 4 | Unspecified | Unspecified | Unspecified | Unspecified |
| (| Comments: | | | | | | |
| 13 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 25 | 2F: Too steep | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified |
| (| Comments: | | | | | | |

Gladwin Mgt. Unit

Gladwin Mgt. Unit

Steve Nyhoff: Examiner

| 14 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 11 | Unspecified | Unspecified | Unspecified | Unspecified |
|----|-------------|---|----|-------------|-------------|-------------|-------------|
| C | Comments: | | | | | | |
| 15 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 12 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 16 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 18 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 17 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 12 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 18 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 19 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| | | | | | | | |

Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 19 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 41 | Unspecified | Unspecified | Unspecified | Unspecified |
|----|-------------|---|----|---------------|---|-------------|-------------|
| C | Comments: | | | | | | |
| 20 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 34 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 21 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 22 | 2F: Too steep | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 22 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 23 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 7 | Unspecified | Unspecified | Unspecified | Unspecified |
| (| Comments: | | | | | | |
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| | | | | | | | |
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Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 24 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 36 | Unspecified | Unspecified | Unspecified | Unspecified |
|-----------|-------------|---|----|--|---|-------------|-------------|
| Comments: | | | | | | | |
| 25 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | | | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 26 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 24 | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 27 | Unavailable | 2F: Too steep | 3 | 2G: Too wet (sensitive soils, does not include access issues) | 3J: Water quality / BMPs (stream, river, or lake) | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 28 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 28 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| | | | | | | | |
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Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 29 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 26 | Unspecified | Unspecified | Unspecified | Unspecified |
|----|-------------|--|----|-------------|-------------|-------------|-------------|
| С | omments: | | | | | | |
| 30 | Available | 5B: Maintain for regeneration purposes | 4 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | omments: | | | | | | |
| 31 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 15 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | omments: | | | | | | |
| 32 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 27 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | omments: | | | | | | |
| 33 | Unavailable | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 7 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | comments: | | | | | | |
| 34 | Available | 5B: Maintain for regeneration purposes | 9 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | comments: | | | | | | |
| | | | | | | | |

Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 35 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 26 | Unspecified | Unspecified | Unspecified | Unspecified |
|----|-------------|--|----|-------------|-------------|-------------|-------------|
| C | Comments: | | | | | | |
| 36 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 9 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 37 | Unavailable | 2H: Blocked by physical obstacle (e.g. upland stand in a lowland area) | 13 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 38 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 24 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| 39 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 4 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | Comments: | | | | | | |
| | | | | | | | |

Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 40 | Unavailable | 2G: Too wet (sensitive soils, does not include access issues) | 7 | Unspecified | Unspecified | Unspecified | Unspecified |
|----|-------------|--|----|-------------|-------------|-------------|-------------|
| C | comments: | | | | | | |
| 41 | Available | 5B: Maintain for regeneration purposes | 33 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | omments: | | | | | | |
| 42 | Available | 5B: Maintain for regeneration purposes | 12 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | omments: | | | | | | |
| 43 | Available | 5B: Maintain for regeneration purposes | 5 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | omments: | | | | | | |
| 44 | Available | 5C: Delay treatment for age/size class diversity or exceptional site quality | 9 | Unspecified | Unspecified | Unspecified | Unspecified |
| С | omments: | | | | | | |
| 45 | Available | 5B: Maintain for regeneration purposes | 9 | Unspecified | Unspecified | Unspecified | Unspecified |
| C | omments: | | | | | | |
| | | | | | | | |

Gladwin Mgt. Unit
Steve Nyhoff: Examiner

| 46 | Unavailable | 5E: Long-Term Retention | 4 | Unspecified | Unspecified | Unspecified | Unspecified |
|-----------|-------------|-------------------------|----|-------------|-------------|-------------|-------------|
| (| Comments: | | | | | | |
| | | | | | | | |
| 47 | Unavailable | 5E: Long-Term Retention | 8 | Unspecified | Unspecified | Unspecified | Unspecified |
| (| Comments: | | | | | | |
| | | | | | | | |
| 48 | Unavailable | 5E: Long-Term Retention | 16 | Unspecified | Unspecified | Unspecified | Unspecified |
| Comments: | | | | | | | |
| | | | | | | | |

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

| SCA Name | SCA Category | Detail Type | Recommendation | Acres |
|----------|--------------|-------------|----------------|-------|
| | | | | |
| Comments | | | | |
| | | | | |

Mgt. Unit Compartment:
Year of Entry

Report 6 - EXISTING SPECIAL CONSERVATION AREA DETAILS



* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservation Type Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area

| s t | Gladwin | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 1 | 4139 - Aspen, Mixed Deciduous | Poletimber Well | 13.1 | 30 | 81-110 | The northeastern portion of the stand is heavy to oak. It has inclusions of low wet ground. The ash that was in the stand is dead and coming down. The stand is in two parts that are separated by a broad base drain. The stand has an extensive white pine stump field. |
| 3 | 6112 - Lowland Aspen | Poletimber Well | 13.3 | 41 | 81-110 | The stand is mainly lowland with some upland knobs. There are pockets of aspen clones in a matrix of swamp hardwoods. There is a surface drainage that flows through the stand but it has no defined bed or bank. It is part of the head waters of Fish Creek. |
| 5 | 4199 - Other Mixed Upland Deciduous | Poletimber Medium | 10.2 | 30 | 1-50 | The stand is hummocky to undulating. It looks like when it was harvested the oak less than 4" DBH were retained. The east side of the stand has a lower crown closure then the west side. There are clones of aspen mixed with the oak. |
| 6 | 4131 - Aspen, Oak | Poletimber Medium | 17.5 | 30 | 1-50 | The stand is undulating. Therefore, the stand is a mix of upland ridges and knobs with lowland swales and depressions. There are scattered clones of dense aspen. The overstory is a mix of about 50% aspen and 50% oak. The ground cover is heavy to blueberry with areas of lowland shrubs. The aspen appears to have a low SI. Therefore, the aspen is short and has a poor form for its age. |
| 7 | 6112 - Lowland Aspen | Poletimber Well | 5.7 | 30 | 1-50 | The stand is low and wet for the most part. The ash is dead and starting to come down. |
| 9 | 6113 - Lowland Maple | Sapling Well | 15.9 | 30 | 1-50 | The stand has a supercanopy of red maple that makes up 5-10% of the canopy. It has a dry ridge along the west side which is heavy to oak and jack pine. The rest of the stand is wet. The ash that was present is dead and starting to come down. |
| 10 | 6113 - Lowland Maple | Sawtimber Medium | 48.8 | 86 | 51-80 | The stand is treatable. There are inclusions that are too wet to harvest. These areas will need to be painted out. |
| 11 | 4199 - Other Mixed Upland Deciduous | Sapling Medium | 10.5 | 28 | 1-50 | The terrain is hummocky it is slightly higher than stand 16. It still has some areas that are wetter, especially in the south end and along stand 10. |
| 12 | 4125 - Black, N. Pin Oak | Poletimber Well | 18.7 | 33 | 1-50 | The stand has some residual sawlog oak. The density of the sawlogs is around 10 BA. The crown closure of the whole stand is around 75%. The stand was harvested in 1983 |
| 14 | 6113 - Lowland Maple | Sapling Poor | 3.9 | 33 | 1-50 | The stand is low and wet. The terrain is very hummocky. The crown closure is only a little higher than 25%. The trees are small for their age so it appears that the site index is low. The stand was harvested in 1983. |
| 15 | 4310 - Pine, Oak Mix | Sapling Well | 10.4 | 23 | Immature | The stand is a mixture of jack pine, aspen and some red pine and oak. There are numerous depressions scattered throughout the stand. The depressions are moderately stock with jack pine with a ground cover of blueberry and leather leaf. The uplands are well stocked jack pine with a ground cover of bracken fern and blueberry. The stand was harvested in 1993. The terrain is hummocky. The white pine is heavily weevilled. |

| S t | | | | Report 7 | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|---------------|---|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 16 | 42121 - Planted Jack Pine, Mixed Deciduous | Sapling Medium | 17.3 | 28 | 1-50 | The stand is seasonally wet. The terrain is hummocky. The jack pine is heavily galled. |
| 17 | 4125 - Black, N. Pin Oak | Sapling Well | 6.2 | 21 | 1-50 | The stand is on a ridge. The crown closure is close to 100%. The aspen is in the eastern portion of the stand. |
| 18 | 4125 - Black, N. Pin Oak | Sapling Well | 21.1 | 22 | Immature | The stand is on a ridge. The density is variable going from well stocked to poorly stocked. The crown closure is around 75%. It is lower at the west end then at the east end. The stand was harvested in 1994. |
| 19 | 4125 - Black, N. Pin Oak | Sapling Medium | 17.4 | 31 | 1-50 | There are scattered low pockets in the stand. There is a lot of young oak and pine in it. |
| 20 | 6126 - Lowland Jack Pine | Sapling Well | 42.0 | 21 | 1-50 | The stand was harvested in 1993 in Center-61 Jack Pine. The stand is mainly jack pine with some scattered oak and aspen. The ground cover is heavy to leather leaf. The crown closure is around 80% with some larger openings. The Gladwin ORV trail runs through the stand bisecting it. The jack pine is heavily galled. |
| 21 | 4125 - Black, N. Pin Oak | Poletimber Medium | 8.9 | 30 | 1-50 | The terrain is slightly hummocky. There are a couple of leatherleaf depressions. Overall, the stand is just entering the pole size class. |
| 22 | 6126 - Lowland Jack Pine | Sapling Medium | 12.0 | 29 | 51-80 | The jack pine and oak are just starting to move into the poles size class. The terrain is generally wet and hummocky. The site index looks to be low. The areas of highest density are on the drier ground. However, these areas are more like slightly upland islands surrounded by a wet leatherleaf bog. |
| 23 | 4125 - Black, N. Pin Oak | Sawtimber Poor | 25.6 | 93 | 1-50 | The stand was shelterwood harvested in 2008. The regeneration is coming in. However, the oak is not over 4' in height. Therefore, it is not established. The overstory oaks are showing some decline. Factor limit: hold for regeneration. Check the stand in 2023 and if the oak regeneration is established harvest the overstory as a clearcut with retention retaining 2 trees per acre. ORV trail runs through the stand. |
| 24 | 6126 - Lowland Jack Pine | Sapling Medium | 31.7 | 28 | 1-50 | The stand is heavy to jack pine with some oak and red maple. Overall, the stand has a 75% crown closure with pockets of bogs and treed bogs. The ground cover is heavy to leatherleaf, sheep laurel, and blueberry. The jack pine in the stand has a moderate level of gall rust. |
| <u></u> 25 | 6126 - Lowland Jack Pine | Sapling Well | 3.3 | 21 | 1-50 | The stand was planted in a slight depression. It is a mix of uplands and lowlands with the lowlands being around 60%. The jack pine has a heavy level of gall rust. |
| 27 | 4125 - Black, N. Pin Oak | Sawtimber Poor | 13.4 | 99 | 1-50 | The ORV trail goes through the stand. It was shelterwood harvested in 2008. The regeneration is starting to come in. However, much of the oak regeneration is < 4' in height so, it is not considered established. Check the stand in 2023 and if the oak regeneration is established then harvest the overstory as a clearcut with retention retaining 2 trees per acre. |

| S t | Gladwin | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 28 | 4125 - Black, N. Pin Oak | Sawtimber Poor | 24.1 | 94 | 1-50 | The stand was shelterwood harvested in 2008. The regeneration is coming in at a moderate stocking level. The oak regeneration though heavy in places is not > 4' in height. So, it is not considered established. There is significant browse on the oak regeneration. The terrain is rolling. Check the stand in 2023 and if the oak regeneration is established harvest the overstory as a clearcut with retention retaining 2 trees per acre. |
| 29 | 42220 - Natural Jack Pine | Sapling Poor | 9.9 | 9 | 1-50 | North East corner degraded by ORV and Vehicles that use the area for parking and disperse camping. The stand was seed tree harvested in 2007 retaining around 20 BA. The area outside of the degraded area is in the process of regenerating. The overall stocking of oak and jack pine is good. However, the oak regeneration is < 4' tall. So, it is not considered established. Check the stand in 2023 and if the oak regeneration is established harvest the overstory as a clearcut with retention retaining 2 trees per acre. |
| 32 | 6127 - Lowland Pine | Poletimber Medium | 4.6 | 31 | 1-50 | The terrain is hummocky. The stand is wet overall. There are some upland areas especially along stand 30. |
| 35 | 6113 - Lowland Maple | Sawtimber Medium | 11.4 | 102 | 1-50 | The stand has some supercanopy log sized trees. However, much of the stand is not very dense and it has sparse regeneration. The stand has some operable ground that is seasonally wet with cinnamon fern ground cover. Only a few of these operable areas are dense enough to harvest. This makes up around 30% of the stand. The south end is wetter with more swamp grass. However, overall the stand is too wet to harvest. |
| 37 | 6113 - Lowland Maple | Sapling Medium | 5.1 | 51 | 1-50 | The stand is low and wet with a few upland areas. The terrain is wet and hummocky. |
| 40 | 42260 - Natural Pine, Mixed Deciduous | Sawtimber Well | 4.6 | 102 | 81-110 | This was a portion of stand 52 that was left out of the treatment. It was left out because it was in compartment 69 before it was merged into compartment 68. The stand is generally flat with some hummocky ground. The ORV trail runs through the stand. Leave the stand untreated for now, for visual concerns. In addition, the stand makes a good retention area for stand 52. |
| 42 | 42290 - Natural Mixed Pine | Sawtimber Well | 5.2 | 86 | 111-140 | The stand is an inaccessible ridge. It may be able to harvest it when stand 44 is ready. The pine on the ridge will hold. The stand also has a thick understory of white pine and maple in areas. When stand 44 is ready to harvest a large tube will be needed to cross M-61 ROW. |
| 43 | 4125 - Black, N. Pin Oak | Poletimber Medium | 1.6 | 29 | Immature | This stand is a narrow ridge. The oak is more common near Center Fireline and jack pine is more common further west. |
| 44 | 4310 - Pine, Oak Mix | Sapling Well | 26.6 | 22 | Immature | There are some residual logs that were left when it was harvested in 1994. The stand does have some lowland pockets that make up around 10% of the area. |
| 45 | 6126 - Lowland Jack Pine | Sapling Poor | 11.9 | 29 | 1-50 | The stand is mainly jack pine over leatherleaf. The terrain is very hummocky. |

| S t | Gladwin | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 | | |
|-------------|--|----------------------|-------|--------------|-------------|--|--|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | | |
| 46 | 6127 - Lowland Pine | Poletimber Medium | 18.6 | 41 | 51-80 | The terrain is hummocky. The hardwoods are more common in the north end and conifer are more common in the south end. The stand is about 20-30% uplands and a large part of the lowlands is seasonably wet. However, there are areas that are too wet to harvest. | | |
| 47 | 6113 - Lowland Maple | Poletimber Well | 11.5 | 42 | 1-50 | The stand is too wet to harvest in general. The uplands make up 10-15%. These upland areas are heavy to aspen. | | |
| 49 | 4122 - Oak, Pine | Sawtimber Medium | 20.8 | 99 | 51-80 | The stand had a heavy white pine understory that was released by the harvest in 2007. The residual oak in the stand is around 40 BA. There is also good oak regeneration in areas where the stand is more open. It is moving toward being a white pine/oak stand. The overstory should be kept to avoid damaging the white pine and to keep it shaded. This will help the white pine to self-prune better and to minimize weevil damage. | | |
| 51 | 42201 - Natural White Pine, Mixed Deciduous | Poletimber Well | 6.0 | 42 | 81-110 | The stand's supercanopy of white pine makes up about 20% of the crown closure. Also, the stand does have some oversized red maple and oak. Much of the maple understory is stump sprout origin. The terrain is hummocky. The stand could be treated in the future during dry or frozen conditions. Wait until the understory gets to be of merchantable size before treating. | | |
| 52 | 42260 - Natural Pine, Mixed Deciduous | Sawtimber Well | 22.3 | 102 | 81-110 | The stand is under contract; Bear Track Mix, sale number 73-018-13-01. The stand had a residual BA cruise of 41 sq. ft. The total harvest BA is 63 sq. ft. The harvest was also a 4" DBH spec harvest. The stand is slightly hummocky and it is wet in places. The windthrow concern is low. | | |
| 54 | 6113 - Lowland Maple | Poletimber Medium | 59.6 | 41 | 81-110 | The stand has surface drainage through it. However, the drainage has no defined bed or bank. These drainages are part of the headwaters of Fish Creek. In the drainage, there is a lot of maple branches. The stand has a lot of wind throw in it, most of it is aspen but some maple and dead ash | | |
| 55 | 4125 - Black, N. Pin Oak | Sawtimber Poor | 3.1 | 100 | 51-80 | The stand was harvested around 2013. There is a lot of slash. There is some regeneration of oaks and some pines. | | |
| 56 | 4310 - Pine, Oak Mix | Sapling Poor | 5.4 | 9 | Immature | The planted jack pine has a moderate survival. It appears to have about 20% mortality. However, there is abundant natural jack pine and oak regeneration, especially in the northern 2/3 of the stand. Overall, this stand would be classified as a fully stocked stand of mainly jack pine and oak. The crown closure is around 25%. Survey on regeneration done. The result shows there are around 2600 stems/ac. | | |
| 57 | 4125 - Black, N. Pin Oak | Sawtimber Medium | 8.6 | 82 | 1-50 | The stand was harvested as a shelterwood/seed tree harvest in 2008. The stand is starting to regenerate with jack, white, and red pines, as well as, some oak and maple. The oak is < 4' in height so it is not established. | | |
| 58 | 6126 - Lowland Jack Pine | Sapling Medium | 5.9 | 30 | Immature | This stand is a treed bog. It was harvested in the past when it dried out. The dominate age was updated in 2015. The crown closure is variable. It goes from well stocked to poorly stocked. The terrain is very hummocky. | | |

| S t | | | | Report 7 | – Forested | Stands Compartment: 68 Year of Entry: 2019 | | |
|-------------|---|----------------------|-------|--------------|-------------|--|--|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | | |
| 59 | 42220 - Natural Jack Pine | Sapling Well | 15.5 | 22 | Immature | The dominate age was updated in 2015. The stand is an upland ridge. The ORV trail runs through it. | | |
| 60 | 42250 - Pine, Oak | Poletimber Medium | 4.6 | 79 | 81-110 | The stand was private land that was acquired. The trees are overmature. The terrain is rolling. | | |
| 62 | 42220 - Natural Jack Pine | Sapling Poor | 23.0 | 18 | 1-50 | The dominate age was updated in 2015. The stand was partially harvested in the summer of 2016. Currently, the sawlog oak have been removed, but the pulp wood is still on site and standing. The stand is a well-defined ridge, which slope steeply going to the east cutting off stand 63. | | |
| 63 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Medium | 24.0 | 67 | 81-110 | The dominate age was updated in 2015. The density is variable going from 10 to 100 BA. There are areas of sapling trees without an overstory, and there are areas of mature trees without an understory. There are also inclusions of leatherleaf and lowland shrub and areas of upland ridges and knobs. The north end of the stand is mostly upland ridges around lowland pockets. This upland area is blocked by a steep ridge that makes up stand 62. | | |
| 64 | 42120 - Planted Jack Pine | Sapling Poor | 18.8 | 3 | 1-50 | The overstory oak is declining and it was harvested in 2010 as a seed tree harvest retaining approximately 20 BA. This stand has some illegal ORV trails and two-tracks in it causing parts of the stand to be degraded. There has been an attempt to curtail the illegal activity by trenching and planting jack pine through the illegal trails and two-tracks. This was done with FTP C73-886 in 2013. This has had some success but it is limited. There is some natural regeneration as well. Overall, the stand is regenerating as a mix of oak and natural and planted jack pine. This mixture is acceptable. | | |
| 65 | 4191 - Mixed Upland Deciduous with Conifer | Sapling Poor | 35.5 | 6 | 1-50 | The stand was harvested in 2010. The retention is a mix of oak and pine and is between 10 and 40 BA. The retention was kept somewhat variable and averaged 15 BA. The stand is starting to regenerate. It is coming in naturally as a mixture of oak and pine. There are some areas where the regeneration is sparse and other areas that are dense. The terrain goes from hummocky flats to undulating ridges. The access to the Molasses River Flooding #5 dike is in the northeast corner of the stand. | | |
| 66 | 6139 - Mixed Lowland Forest | Sapling Poor | 8.7 | 7 | 1-50 | The stand was harvested in 2010 retaining 20 BA of red pine sawlogs. The red pine sawlogs are too large for utility poles. The red pine was left for both a seed source and for visual. The stand is starting to regenerate naturally to a mixed stand of oak and pine. The current stocking level is moderate. | | |
| 67 | 6126 - Lowland Jack Pine | Sapling Medium | 6.5 | 18 | Immature | The stand was harvested in 1999 as part of Molasses 5 Jack Pine, sale # 73-004-98-01. Currently the stand is a light J3 with some oak. The stand has some problems with weevils and galls. | | |
| 68 | 42221 - Natural Jack Pine, Mixed Deciduous | Poletimber Poor | 5.3 | 31 | 1-50 | The stand is a mix of uplands and lowlands. The uplands make up the majority of the stand. The lowlands are in depressions that are heavy to leatherleaf. | | |
| 70 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Poor | 37.5 | 22 | 1-50 | The stand is variable. The oak is heavier in the eastern portion of the stand and maple is heavier in the western portion. There are inclusions of lowland shrubs. The terrain is hummocky. | | |

| S t | Gladwin | Mgt. Unit | | Report 7 | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|---|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 71 | 6129 - Mixed Coniferous Lowland Forest | Poletimber Well | 11.7 | 122 | 141-170 | The stand was harvested in 1999 as part of Molasses 5 Jack Pine, sale # 73-004-98-01. Currently the stand is a light J3 with some oak. The stand has some problems with weevils and galls. |
| 72 | 4131 - Aspen, Oak | Sawtimber Medium | 10.7 | 88 | 51-80 | The stand needs to be harvested as a clear cut with retention. The retentions should be marked Oak and den trees. There is a red line in place but it is fading. |
| 73 | 6126 - Lowland Jack Pine | Sapling Well | 34.1 | 17 | Immature | The stand was harvested as part of the Molasses 5 Jack Pine, sale # 73-004-98-01. The stand is fully stocked and is a mix of jack pine and oak. Overall, the crown closure is a little over 75%. It is a mix of jack pine and oak. The regeneration is doing well with a low to moderate occurrence of galls. The terrain is hummocky. There are also a couple pockets of leatherleaf. |
| 74 | 4125 - Black, N. Pin Oak | Sapling Poor | 13.5 | 6 | 1-50 | The stand was overmature and it was harvested in 2010 as a shelterwood-seed tree harvest retaining 20-30 BA. The retention was made up of marked oaks and pines. In addition, the oak that was < 4" DBH were also retained. This left the stand with a variable retention from both the advance regeneration and green marked oak and pine. The stand is starting to regenerate naturally as a patchy mix of oak/ pine. In this stand the ORV trail runs through it. |
| 75 | 6113 - Lowland Maple | Poletimber Medium | 15.2 | 79 | 51-80 | This stand is low and wet and it is on Roscommon Soils. It is a mix of swamp hardwoods with pockets of white cedar scattered in it. The ground cover is heavy to sensitive fern, cinnamon fern, tag alder and Michigan holly. The dead ash is coming down leading to the stand having canopy gaps. These are filling in with maple and tag alder. There are areas of lowland shrubs with some overstory maple and dead ash. |
| 76 | 6139 - Mixed Lowland Forest | Poletimber Poor | 25.6 | 41 | 1-50 | The stand is too wet to harvest. It is mainly a tag alder swamp with scattered trees. The trees are mainly quaking aspen and maple. The ash in the stand is dead and coming down. |
| 77 | 4122 - Oak, Pine | Sawtimber Poor | 38.2 | 81 | 1-50 | The stand runs along Ridge Rd and Center Fireline. It is undulating and there are some frost pockets. The stand was harvested as a shelterwood-seed tree leaving some oak and pine in June of 2010. The residual BA is around 20. The stand is starting to regenerate naturally as a mix oak/pine stand. Currently, the stocking level is moderate. The ORV trail runs through much of the stand. |
| 78 | 4310 - Pine, Oak Mix | Poletimber Well | 18.1 | 53 | 81-110 | The stand boundary is close to the soil type boundary. It has a high percentage of oak and jack pine with larger diameters. Also along the east edge there are pockets of wetter ground having leather leaf and blueberry. These pockets are small and not extensive. |
| 79 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 37.1 | 43 | 51-80 | The stand is about 55% uplands and 45% lowlands. There are a couple of drainages that cross it. There is also a closed old logging trail that goes through the stand starting from Center Fireline. The trail had a culvert installed to cross the southern drain. The south end and a portion of the north central area of the stand are wet and they are heavy to maple, ash and cedar. The ash is dead, for the most part, and it is starting to come down. The stand has areas of standing water in it and the terrain is very |

The stand has areas of standing water in it and the terrain is very hummocky.

| S t | Gladwin | Mgt. Unit | | Report 7 | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|------------------------------|---------------------|-------|--------------|-------------|---|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 80 | 6113 - Lowland Maple | Poletimber Well | 42.5 | 53 | 1-50 | The stand is very hummocky and wet. There are several broad base drainages that cross the stand. The stand is more lowlands then uplands and it is heavy to swamp hardwoods. However, there are upland portions of the stand that are heavy to aspen. |
| 81 | 6112 - Lowland Aspen | Poletimber Well | 27.7 | 43 | 51-80 | This stand is variable with a lot of areas of standing water. The ground is generally hummocky. The stand is more lowlands then uplands and the upland areas are heavy to aspen. There are several drainages crossing the stand. The ash in the stand is dead. The low areas may be too wet to harvest. |
| 82 | 42220 - Natural Jack Pine | Poletimber Well | 26.7 | 41 | 81-110 | The stand is mainly jack pine. There is an area that is heavy to white pine at the south end of the stand. It is moving well in to poles. The Gladwin ORV Trail runs through the stand in 2 places. Hold the stand 10 years and cut at rotation age. The Stand has inclusions of leather leaf. The terrain is hummocky. |
| 83 | 42220 - Natural Jack Pine | Sapling Well | 15.2 | 18 | Immature | This stand was harvested in 1999 as part of the Molasses 5 Jack Pine, sale 73-004-98-01. The stand has regenerated well to a J3/O2. It has some depressions so there are some frost and cold air drainage problems. The Gladwin ORV trail runs through a portion of the stand. |
| 84 | 42120 - Planted Jack Pine | Sapling Medium | 14.3 | 9 | Immature | The terrain is rolling. It was harvested and planted to jack pine. The stand is mixed with oak. The oak is concentrated on the hills. The valleys have very little oak because of cold air drainage leading to frost pocket problems. The Gladwin ORV trail runs through the stand. |
| 85 | 42220 - Natural Jack Pine | Sapling Well | 60.3 | 18 | Immature | The stand has regenerated well. The jack pine should be a pole stand in 10 years. In the south west end of the stand it is heavy to leatherleaf with an overstory of jack pine. However, going away from that area the leatherleaf becomes less predominate and the jack pine is often mixed with oak. The ground cover is a mixture of sheep laurel, blueberry, and leatherleaf. |
| 86 | 4125 - Black, N. Pin Oak | Sawtimber Medium | 48.5 | 80 | 51-80 | The terrain is undulating to rolling. The ridge has a PVCd to PArVHa habitat type. The stand was shelterwood harvested in 2001. In addition, the Gladwin ORV trail runs through the stand. |
| 87 | 42210 - Natural Red Pine | Poletimber Well | 3.7 | 113 | 81-110 | This stand is a small pocket of red pine/jack pine. It has a high visual value being between two large clear cuts. The north end is heavy to red pine sawlogs and the south end is heavy to jack pine pulpwood. |
| 88 | 6126 - Lowland Jack Pine | Poletimber Well | 8.2 | 26 | 51-80 | The dominate age was updated in 2015. The terrain is hummocky. The stand has significant gall rust. |

6126 - Lowland Jack Pine

89

Sapling Medium

20.4

31

51-80

The dominate age was updated in 2015. The terrain is hummocky. There are areas of upland in the stand. However, much of the stand is lowland.

| S t | Gladwii | n Mgt. Unit | | Report 7 | Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|---|----------------------|-------|--------------|----------------------------|---|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 90 | 429 - Mixed Upland Conifers | Sapling Medium | 53.2 | 16 | Immature | The stand was an oak clear cut in 2004. It was interplanted with jack pine around 2005. The regeneration and survival of the planting was poor so it was replanted in 2008, with FTP C73-775. Currently the overall stocking is moderate to well. The terrain is hummocky with it being mostly uplands. The stand has some inclusions of lowlands. There is some seeding in of red and white pines. The white and red pine seedlings are more common in the northern portion of the stand. The stocking is lowest in the leather leaf inclusions. The jack pines in the stand are often heavily galled. |
| 91 | 4191 - Mixed Upland Deciduous with Conifer | Sapling Medium | 25.4 | 16 | Immature | The stand was harvested in 2001. The harvest retained oak and pine less than 4 inches DBH. It has regenerated to an O2. Other species present are white pine, choke cherry, jack pine, and aspen. The white pine regeneration has a low level of weevil damage at the current time. The density is highest along the trail but decreases going away from it. The open areas have oak, maple, and pine regeneration but it is less than 5' tall. The stand should be fully stocked in 10 years. |
| 92 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Medium | 24.5 | 89 | 51-80 | This stand is the flood plain of the Molasses River. The flood plain is bordered by steep banks, which are tiered. The aspen in the stand is way over mature. In addition, along the river there are several areas of alluvial shrubs. |
| 93 | 4131 - Aspen, Oak | Sapling Well | 78.1 | 24 | Immature | The species distribution is patchy. There are areas at the north west and south east ends that are heavy to oak, while much of the rest is heavy to aspen. There are also some low wet drainages that run through portions of the stand. In these areas, the stand is heavier to red maple, paper birch and trembling aspen. When the stand was harvested in 1994 some sawlog oaks were left. |
| 94 | 6113 - Lowland Maple | Poletimber Medium | 18.2 | 79 | 51-80 | The stand is wet overall, with some small areas of dry ground at the south end. The drainage runs through the stand at both the north and south ends. The soil under the drainages is Roscommon and these have inclusions of L-Type. There is also a dry knob in the south-central part of the stand. The knob is too small to delineate as a separate stand |
| 96 | 6127 - Lowland Pine | Sapling Medium | 18.3 | 37 | 1-50 | The stand is similar to stand 101 but the diameters of the trees are greater. The overstory is patchy with areas of dense J3 as well as open areas of leatherleaf and sheep laurel. Along the south side there is an upland ridge that is an O2, with blueberry and bracken fern. The north edge of the stand has regenerated to white pine. The white pine in the stand has some weevil problems but it is not extensive. |
| 98 | 4310 - Pine, Oak Mix | Sapling Medium | 25.9 | 16 | Immature | The stand was an oak clear cut in 2004. It was interplanted with jack pine around 2005. The regeneration and survival of the planting was poor so it was replanted in 2008, with FTP C73-775. Overall, the stand's stocking density is moderate to well. Oak is scattered throughout the stand but it is heaviest in the north ½ of |

scattered throughout the stand but it is heaviest in the north ½ of the stand. The other species that are seeding into the stand are white pine, jack pine, and red pine. The jack pines in the stand are often heavily galled.

| S t | Gladwin | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 99 | 6126 - Lowland Jack Pine | Sapling Poor | 9.6 | 9 | Immature | The stand was an oak clear cut in 2004. It was interplanted with jack pine around 2005. The regeneration and survival of the planting was poor so it was replanted in 2008, with FTP C73-775. The overall stocking is moderate to poor because of soil conditions. The stand is lower and wetter than stand 98. The natural oak regeneration is lower than stand 98 but it is still moderate. The ground cover is a mixture of tag alder, blueberry, sheep laurel, and leatherleaf. |
| 100 | 6119 - Mixed Lowland Deciduous Forest | Sapling Poor | 33.8 | 27 | 1-50 | The stand is low and wet. The east side is more of an L-type. There are knobs of marginal uplands through the center of the stand. The terrain is hummocky. |
| 101 | 6139 - Mixed Lowland Forest | Sapling Medium | 8.7 | 33 | 1-50 | The stand has some overstory oak with an understory of white pine, red pine, jack pine, and oak. The overall stocking of the regeneration is moderate. The terrain is hummocky and it show signs of having a high-water table. The ground cover is sheep laurel, blueberry, and leatherleaf. |
| 102 | 6126 - Lowland Jack Pine | Poletimber Well | 3.0 | 37 | 81-110 | This stand is a mix of uplands and lowlands with the lowlands being around 55%. |
| 103 | 6126 - Lowland Jack Pine | Poletimber Medium | 5.4 | 37 | 1-50 | The stand is wet with the ground cover of sheep laurel, leatherleaf, and blueberry. |
| 104 | 6126 - Lowland Jack Pine | Poletimber Poor | 23.9 | 31 | 1-50 | The east end of the stand is a mixture of jack pine, trembling aspen, and oak with a heavy component of lowland shrub. The overall stocking is poor. This area was part of a rotational burn in the past. The terrain is hummocky and the ground cover goes from bracken fern/blueberry to sheep laurel/blueberry/leatherleaf. In addition, the regeneration is patchy and goes from medium stocked to non-stocked and from aspen to jack pine. Some jack pine, oak, and white pine is seeding in where the stand is open. The crown closure is around 25%. The Terrain is hummocky. |
| 105 | 4125 - Black, N. Pin Oak | Sapling Medium | 24.7 | 35 | 1-50 | The stand has many downed trees. The terrain is hummocky. The wettest parts of the stand are the center and north eastern portions. Stand density is variable. There is a significant drainage along the southern side of the stand. |
| 106 | 6113 - Lowland Maple | Poletimber Well | 41.0 | 89 | 81-110 | The green ash in the stand is dead, for the most part. There are still a few trees that are hanging on. The red maple is in good shape. However, much of the stand is too wet to harvest. The Stand has 2 intermittent drainages running through it. |
| 107 | 4131 - Aspen, Oak | Poletimber Medium | 12.4 | 35 | 1-50 | This ridge is hummocky in the center, even though it is dry overall. The edges of the stand are quite wet. The stand was habitat cut in 1990 with FTP W73-143. The stand is starting to move into poles. Some of the larger oak that were left when the stand was habitat cut have died and are starting to come down. |
| 108 | 6113 - Lowland Maple | Poletimber Poor | 35.9 | 61 | 1-50 | The stand has a couple of dry knobs in the south half of the stand, but they are small. Overall, the stand is wet. The water smalls |

Poor

but they are small. Overall, the stand is wet. The water smells stagnate and it has a low out flow. The ash in the stand is dead.

| S t | Gladwin | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 109 | 6113 - Lowland Maple | Poletimber Medium | 27.8 | 59 | 1-50 | The stand is a mix of small knolls and wet swales. The site is very hummocky with many tip up mounds. The ash is dead and coming down in areas. Habitat types are a mix of PArVHa and PArVCo |
| 111 | 4199 - Other Mixed Upland Deciduous | Sapling Poor | 23.1 | 31 | 1-50 | This stand was part of a rotational burn. The stand has a overstory of mature oak with an understory of oak and pine coming in. Currently the regeneration is at a moderate stocking level. Leave the stand uncut retaining the over story for diversity and continue seeding. |
| 113 | 4199 - Other Mixed Upland Deciduous | Sapling Medium | 5.5 | 31 | 51-80 | The stand is mainly uplands. There is a low-wet area in the central portion of the stand. The crown closure is variable. The terrain is hummocky |
| 114 | 4311 - Pine, Aspen Mix | Poletimber Medium | 25.8 | 41 | 51-80 | The stand is mostly uplands. The jack pine in the stand is concentrated on the driest knobs. The tamarack in the stand is thickest along stand 153. |
| 116 | 6126 - Lowland Jack Pine | Poletimber Well | 29.3 | 33 | 81-110 | The stand is quite dense overall. However, the size is variable going from seedlings to poles. There is some galling in the stand but most are located on side branches and not on the main bole. The jack pines in the stand have semi-serotinous to non-serotinous cones. Therefore, natural seeding is occurring. This area was part of a rotational burn in the 80s. |
| 117 | 4310 - Pine, Oak Mix | Sapling Medium | 26.9 | 14 | Immature | This stand was harvested as a seed tree harvest in 2001 and a post-harvest burn was done to stimulate oak and jack pine regeneration. The burn did increase the amount of regeneration. It has taken the stand from poorly stocked to medium stocked. The oak regeneration is heaviest in the northern portion of the stand and jack pine is heaviest along the east and south sides. Much of the regeneration has been heavily browsed by deer. The residual oak that was left has some mortality, some of the mortality was caused by the control burn, but some is natural. In addition, as the trees die they are being cut up for firewood and removed by the public. |
| 118 | 6113 - Lowland Maple | Sawtimber Poor | 26.8 | 86 | 1-50 | The stand is too wet to harvest. The ash in the stand is dead and coming down. The stand is now a mix of sapling, pole and sawlog maple. As the ash comes down there may be an increase in the maple that is being wind thrown. |
| 119 | 4310 - Pine, Oak Mix | Sawtimber Medium | 9.3 | 80 | 1-50 | The stand was left out when stand 85 was harvested. It is sparse and it is a mix of jack pine and oak. The regeneration in the stand is O1J1. Hold stand for 10 years. |
| 120 | 6113 - Lowland Maple | Poletimber Poor | 14.3 | 53 | 51-80 | The stand is wet with inclusions of lowland shrubs. It varies from a sparse pole stand to a medium stocked sawlog stand. The stand is inoperable being too wet and having poor access. It was part of a rotational burn in the 80s. The ash in the stand is dead. There is some natural regeneration in the understory but it is sparse. |
| 124 | 4125 - Black, N. Pin Oak | Sawtimber Poor | 8.2 | 81 | 1-50 | The stand is a mixture of oak, pine, maple, and aspen. The stand has a red line around it but it was never sold. It needs to be cut as a seed tree retaining 10-20 BA. There are some areas of advance regeneration that will need to be protected when the stand is harvested. |

| S t | Gladwin | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 125 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Well | 11.9 | 72 | 51-80 | The stand is a swamp hardwood that has a trace of elm, hemlock, basswood, swamp white oak, white pine and birch. The stand is diverse. |
| 127 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Medium | 36.6 | 89 | 51-80 | This stand is the flood plain of the Molasses River. The flood plain is bordered by steep banks, which are tiered. The aspen in the stand is way over mature. In addition, along the river there are several areas of alluvial shrubs. |
| 128 | 4130 - Aspen | Sapling Well | 25.0 | 27 | 1-50 | The stand is somewhat hummocky. |
| 129 | 4123 - Red Oak | Sawtimber Poor | 5.7 | 98 | 1-50 | The stand was harvested in 1999 as a shelterwood. The residual BA is around 40 sq. ft. The stand has pockets of good regeneration. The understory is at a moderate stocking. |
| 131 | 4130 - Aspen | Poletimber Well | 38.3 | 32 | 81-110 | There is more aspen in this stand than in stand 132. It is dissected by numerous small drains that flow into the Molasses River. The soils on the river side of the stand are wetter. The stand is a mix of uplands and lowlands with the lowland being around 25%. |
| 132 | 4199 - Other Mixed Upland Deciduous | Sapling Medium | 15.9 | 32 | 1-50 | The stand is a mixture of uplands and lowlands with the lowlands being around 40%. There is a lower percentage of aspen, and the percentage of oak and conifer is higher than in stand 131. The stand is not uniform in its species mixture. The north end is heavier to oak. The central area is higher to pine. The south end is heavier to aspen. The crown closure is closer to 80%. There are pockets of conifer seedlings in the understory in places. The terrain is hummocky with some ridges. |
| 133 | 6112 - Lowland Aspen | Sapling Medium | 7.4 | 22 | 1-50 | The stand has a drainage running along most of the south side. The ash in the stand is dead and this lowers the crown closure to below 75%. It was harvested as a clearcut in 1996. The terrain is hummocky. |
| 134 | 4130 - Aspen | Sapling Poor | 7.0 | 6 | Immature | Much of the oak regeneration is still less than 4' tall and it is heavily browsed by deer. When the stand was cut in 2010 the trees less than 4" DBH were retained. These residual trees are what makes up most of the crown closure. The terrain is hummocky. The crown closure goes from < 25% at the west end and up to around 60% at the east end. |
| 135 | 4125 - Black, N. Pin Oak | Sapling Poor | 24.7 | 7 | Immature | Much of the oak is less Than 4' Tall. The terrain is hummocky. when the stand was cut tree less than 4" DBH wore retained. |
| 136 | 6112 - Lowland Aspen | Poletimber Poor | 4.8 | 32 | 1-50 | This area is very wet and it is a drainage. The ash in the stand is dead lowering the crown closure to around 25%. |
| 139 | 6126 - Lowland Jack Pine | Sapling Well | 66.0 | 24 | Immature | The stand was harvested in 1993. The stand is well stocked but there are open areas in it. The terrain is hummocky. There are some open leatherleaf areas and open upland herbaceous areas. The crown closure is closer to 75%. The uplands to lowlands mix is about 50-50. |

| S t | Gladwir | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 140 | 42210 - Natural Red Pine | Sawtimber Well | 8.6 | 85 | 111-140 | The western portion of the stand had the hardwoods and jack pines removed leaving red pines for visual in 2003. The eastern stand has jack pine poles and logs mixed with red pine. The area could be treated. However, the stand across M-61 does not meet green up requirements. |
| 141 | 6113 - Lowland Maple | Sapling Medium | 10.6 | 18 | Immature | The stand is a drainage without bed or bank. The overstory is gone. |
| 142 | 6117 - Lowland Deciduous, Mixed Coniferous | Sawtimber Well | 13.8 | 89 | 81-110 | The stand is a mixture of uplands and lowlands. The stand gets wetter going west and the pine density increases. Harvest the stand as a clear cut with retention. Retain some marked oaks and red pines. However, do not exceed 5% by BA. The marked trees should be far enough back so they will not fall into M-61. There are some very wet areas in the stand that may need to be painted out. |
| 143 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Well | 9.9 | 33 | 1-50 | The stand is low and wet with pockets of E5/E2 and P5/P2. Currently, there are poles starting to show up in the stand. |
| 144 | 6113 - Lowland Maple | Poletimber Medium | 19.7 | 20 | 51-80 | This stand is a part of the Fish Creek flood plain north of M-61. The tree species are a mixture of maple, oak and some aspen and white pine. The soil is Evart -Winterfield. |
| 145 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Medium | 32.9 | 85 | 1-50 | The stand was harvested in 2003. The oaks less than 4 inches DBH were retained. The aspen didn't regenerate well due to heavy deer browse. What aspen did regenerate is in scattered clones. There is also some oak regeneration but it is too small to be called established. Therefore, the stand is mainly made up of patches of trees with a lot of open area between them. When it was harvested, they used 3 tubes to get through the stand and up to stand 163. In the stand, there are areas which are very wet. |
| 146 | 4191 - Mixed Upland Deciduous with Conifer | Poletimber Medium | 18.8 | 33 | 1-50 | This stand is sparse but overall it has a medium stocking level. It is a mixture of oak, maple and aspen and it is just becoming a pole stand. There is some regeneration but it is not extensive. The terrain is hummocky with a lot of wet pockets. |
| 147 | 4199 - Other Mixed Upland Deciduous | Sapling Poor | 17.9 | 20 | Immature | The stand was harvested in 2013. It is expected to regenerate to a mixture of oak and aspen. If the regeneration is not adequate, interplant red pine. The stand is made up of the residual at this time. Deer are using the area heavily. Browse on the visible sprouts is around 90%. Set up a treatment to check the regeneration in 2018. |
| 149 | 6127 - Lowland Pine | Sapling Medium | 25.0 | 23 | Immature | The stand is a mixture of uplands and lowlands. Much of the stand is low and wet with maple and oak over tag alder. There are numerous knobs also in the stand. The overall stocking level is moderate. The stand becomes wetter going south. The density also decreases going south. The open areas in the stand are low and wet. They are either leather leaf or alder. They have scattered pines and hardwoods. |
| 150 | 42221 - Natural Jack Pine, Mixed Deciduous | Sapling Medium | 6.8 | 26 | 1-50 | This stand was not replanted when stand 208 was. The stand has regenerated as a J2O2 with a moderate stocking level. The ground is very uneven full of mounds and pits. Habitat PArVCo. |

| s t | Gladwir | Gladwin Mgt. Unit | | | – Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 152 | 6113 - Lowland Maple | Sawtimber Medium | 7.2 | 84 | 1-50 | The stand is hummocky. The ash in the stand is now dead. |
| 155 | 6117 - Lowland Deciduous, Mixed Coniferous | Poletimber Medium | 13.2 | 69 | 1-50 | The stand is a matrix of uplands and lowlands with the lowlands being the majority. The uplands are mainly two islands of Jack pine. There are several wet drains that flow into Stand 153. None of them have defined beds and banks. |
| 158 | 6127 - Lowland Pine | Poletimber Medium | 3.4 | 81 | 1-50 | This stand is fairly wet. It is a mixture of sawlog oak and pine over and understory of maple and white pine. |
| 160 | 4121 - Oak, Aspen | Sawtimber Poor | 5.1 | 88 | 1-50 | This is a ridge that has oak sawlogs with some maple, birch, and quaking aspen. The southern end and along the edges is where most of the lowland sits. |
| 161 | 6112 - Lowland Aspen | Sapling Medium | 9.7 | 24 | Immature | |
| 163 | 42210 - Natural Red Pine | Sawtimber Poor | 12.1 | 80 | 1-50 | The stand has an area of thick red pine surrounded by red pine that is sparse. The habitat type is PArVCo. The stand was harvested in 2011 with the Fish Creek North sale, sale number 73-006-06-01. The regeneration varies from poor to fully stocked. The regeneration is heaviest at the northeast end. Since the harvest some of the residual oak and pines have come down. |
| 164 | 4119 - Mixed Northern Hardwoods | Poletimber Well | 15.2 | 40 | 81-110 | The stand has pockets of jack pine at the north end and grades to swamp hardwoods going south. There are areas that may be too wet to harvest but there are portions that can be treated. The maple goes from saplings to logs. |
| 165 | 42220 - Natural Jack Pine | Poletimber Medium | 5.9 | 30 | 51-80 | The stand has an area of jack pine through the center. It varies from seedlings around the main patch of jack pine to poles inside. Many of the trees are poles but have poor form only having one stick in them. The pine that is seeding into the open areas in the stand are heavy to jack pines but there are some red pines. |
| 166 | 4131 - Aspen, Oak | Sawtimber Medium | 7.2 | 78 | 51-80 | The stand is small and along M-61. It was put up but not harvested in 2011 in the Fish Creek North sale; sale number 73-006-06-01. This unit was returned to the state. Harvest as a clear cut with retention. The retention should be marked oaks and red pines. The marked trees should be far enough back so they do not fall into M-61. In addition, the BA should not exceed 5% of the total BA. |
| 167 | 42260 - Natural Pine, Mixed Deciduous | Poletimber Medium | 12.3 | 40 | 1-50 | The stand is filling in with red, white and jack pines. Most of the seedlings are less than 12 years old. The stand has some areas of swamp hardwoods toward the northern end. Portions of this area may be too wet to harvest but much of it could be. The pine is concentrated in the southern 1/2 of the stand. Harvest the stand as a seedtree. Cut all the aspen and jack pine and retaining 10-20 BA of red pines and swamp hardwoods that are wind firm. These should be kept in patches. In addition, all the branch material should be left on site to increase the seed source to naturally regenerate the stand. If the stand does not regenerate interplant with pine. |

| S t | Gladwin | Mgt. Unit | | Report 7 | Forested | Stands | Compartment: 68 Year of Entry: 2019 | |
|-------------|--|--------------------|-------|--------------|----------------------------|--|--|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | | General Comments: | MICHIGAN |
| 169 | 4125 - Black, N. Pin Oak | Sapling Well | 39.8 | 19 | Immature | as a clearcut retaini droughty ridge. Thei stump sprouts. The blueberry, wintergree fair amount of seedir of the stand. The star pockets are hear regeneration is spars | for the most part. It was harve ing oak < 4" DBH. The stand is re are many single stemmed oat ground cover is sweet fern, feath, blackberry, and poverty grasing in of red and jack pine in the nd has some scattered low pocky to blueberry and it is hummo is in the low areas probably becasion of the oak and wet ground | mainly on a ak as well as ather moss, as. There is a western end kets. The low cky. The cause of frost |
| 170 | 6113 - Lowland Maple | Poletimber Well | 5.8 | 85 | 51-80 | harvested. The sta the Fish Creek North was returned to t However, because of and the likelihood of v clearcut with rete retentions should be wind firm and will not | e in density and wetness, but it of and was put up but not Harvestern sale, sale number 73-006-06-06-06-06-06-06-06-06-06-06-06-06 | ed in 2011 in 01. The unit arvested. e it is to M-61, be done as a vest. The ers that are I also have to |
| 171 | 6113 - Lowland Maple | Poletimber Poor | 3.8 | 85 | 51-80 | overall, it is too we There is a drainage t | mount of standing water in the set to harvest. The ash in the stand that goes through the stand and ugh a box culvert under M-61 | nd is dead. |
| 173 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Well | 30.9 | 40 | 81-110 | red maple with so harvested as a cle retention should be r oaks. However, the The stand will ne conditions to avoid ru | derstory of tag alder. The oversome oaks and pines. The stander cut with retention. If it is handed up of the red pines and so BA should not exceed 5% of the ded to be harvested during dry cutting problems. The terrain is hot extractions are pushing legar | could be vested the ome marked ne total BA. or frozen ummocky. In |
| 174 | 4199 - Other Mixed Upland Deciduous | Poletimber Poor | 8.8 | 86 | 1-50 | of less than 1 acre. widely scattered in crown closure to exce | this stand but it is mainly in one There are other oaks and aspe the stand. Oak poles are prese eed 25%. However, there is sti If stand 173 is harvested, then stand. | ens that are ent causing Il lots of open |

81-110

81-110

The stand is low and wet. There are still some live ash trees in the

stand but they have EAB. The stand has a lot of down branch material. There was a significant amount of elm in the stand at one time. However, most of it is now dead and coming down.

The stand is mainly red maple and black ash over an understory

of tag alder. The trees are pole size. The terrain is hummocky. The stand is part of the headwaters of Fish Creek. As such the stand gets wetter going to the west. The tree density also decreases going west.

6113 - Lowland Maple

6113 - Lowland Maple

175

176

Poletimber

Well

Sapling Well

21.6

19.3

41

40

| S t | Gladwin | Mgt. Unit | | Report 7 | Forested | Stands Compartment: 68 Year of Entry: 2019 | |
|-------------|---|----------------------|-------|--------------|----------------------------|--|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: | |
| 178 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Well | 21.1 | 86 | 81-110 | The stand is mainly lowlands with some slight upland ridges. On the higher ground the stand is more of an E9 and on the lower ground it is more of an E6. The ground cover is mainly cinnamon fern, sensitive fern, and grass, there is also some blueberry present. The ash in the stand is 80% dead. There are also drainages in the stand that are too wet to harvest that will need to be painted out. Therefore, the harvest acres will be significantly less than the inventory acres. | |
| 179 | 6113 - Lowland Maple | Poletimber Medium | 26.1 | 40 | 81-110 | Stand has rolling topography. On the higher ground the stand is more of an E9 and on the lower ground it is more of an E6. The Gound cover is mainly Cinnimon fern, sensitive fern, and grass there is some blueberry also present. Habitat PArVCo | |
| 180 | 6132 - Mixed Lowland Forest with Cedar | Poletimber Well | 6.9 | 85 | 111-140 | The stand is very low and wet. It has areas of thick cedar scattered in pockets throughout the stand. There are also pocket of swamp hardwoods. The hardwoods are mainly red maple wit some surviving black ash. Overall the stand is too wet to harves and the ash that is alive has EAB. | |
| 181 | 6113 - Lowland Maple | Poletimber Well | 23.4 | 40 | 81-110 | The stand is very low and wet. It has areas of thick cedar scattered in pockets throughout the stand. There are also pockets of swamp hardwoods. The hardwoods are mainly red maple with some surviving black ash. Overall the stand is too wet to harvest and the ash that is alive has EAB. | |
| 182 | 4125 - Black, N. Pin Oak | Sapling Poor | 19.7 | 6 | Immature | The stand is a dry ridge, for the most part. The habitat type is a wetter PVCd or a dryer PArVHa. The western side of the stand flattens out and becomes more hummocky and show signs of having a seasonal high water table. The stand was harvested in 2011 in the Fish Creek North sale, Sale number 73-006-06-01 | |
| 183 | 6119 - Mixed Lowland Deciduous Forest | Poletimber Well | 9.3 | 71 | 51-80 | The stand is a mix of uplands and lowlands. The lowlands are around 65%. There are pockets of thick alder in the understory. | |
| 184 | 4199 - Other Mixed Upland Deciduous | Poletimber Medium | 7.1 | 87 | 51-80 | This stand is an oak ridge that runs through a L-Type. the aspen in the stand is declining. The access to the stand is restricted because of wet ground around it. | |
| 186 | 42220 - Natural Jack Pine | Poletimber Well | 28.6 | 32 | 1-50 | This stand was harvested in 1993. It has regenerated to a moderately stocked jack pine stand. The uplands to lowlands ratio is around 50-50. The lowlands are heavy to leather leaf and the uplands are heavy to bracken fern and blueberry. The density is variable and goes from poorly to well stocked. The trees in the lower density areas are squat and open grown having poor form. There is significant level of galls on the jack pines. The red pines and oaks are on the dryer ground. The red pines are putting on 1.5' to 2' feet of growth a year. There are some poles present in | |

81-110

42220 - Natural Jack

Pine

187

Poletimber

Well

23.1

33

the south end of the stand.

The stand has pockets of leather leaf. The over story is jack pine

mixed with oak, birch, and red pine. When the stand was harvested, the red pines were left. These are heaviest in the south end of the stand. The open areas are seeding in with red, and jack pine; oak and maple. The jack pine is now mostly poles.

| S t | Gladwii | Gladwin Mgt. Unit | | | - Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|-------------------|-------|--------------|-------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 188 | 42121 - Planted Jack Pine, Mixed Deciduous | Sapling Well | 26.4 | 23 | Immature | The stand was harvested in 1993 and has regenerated as a mixture of jack pines and aspens with some red pines and oaks. There are numerous depressions scattered throughout the stand. The depressions are J2 with blueberry and leather leaf. The uplands are J3 with bracken fern and blueberry. |
| 189 | 42290 - Natural Mixed Pine | Sapling Medium | 6.0 | 15 | 51-80 | The ground is somewhat hummocky. The regeneration in the stand is thick at the south end and gets sparser going north. The regeneration is coming along well. Its age ranges from 25 years old to 5 years old. However, most of it is around 15 years old. So, leave the stand alone and let the regeneration fill in. |
| 190 | 6119 - Mixed Lowland Deciduous Forest | Sapling Poor | 9.1 | 13 | 1-50 | This stand is low and wet. There are portions of the stand which are lowland shrubs. The ash in the stand is dead. The jack pines look to be 33 years old and the maples and oaks look much younger. There is a small amount of upland along the perimeter. However, most of the stand is too wet to harvest. |
| 191 | 6117 - Lowland Deciduous, Mixed Coniferous | Sapling Poor | 39.1 | 15 | Immature | The stand was harvested in 2003 and it has regenerated to a moderate stocking of oaks, jack pines, mixed with some maples and aspens. The stand has some low and wet areas that are more of an L-Type. The terrain is hummocky. |
| 192 | 4130 - Aspen | Sapling Well | 28.8 | 26 | Immature | The stand was harvested in 1993 and it has regenerated to a well stocking of aspens, oaks, jack pines, mixed with some maples. The stand has some low wet areas that are more of an L-Type. The terrain is hummocky |
| 193 | 4130 - Aspen | Sapling Well | 11.3 | 16 | Immature | The stand was harvested in 2003. The harvest was done leaving some oak. It has regenerated to a mixture of oak, maple and aspen. There are dense pockets scattered in the stand but there are also some openings. |
| 194 | 6117 - Lowland Deciduous, Mixed Coniferous | Sapling Medium | 14.9 | 26 | Immature | The stand was harvested in 1993. The regeneration is patchy. There are patches of O3 and A3. As well as areas that have very little regeneration. In addition, in some of the open areas there are oaks, pines, and tamaracks seeding in. The overall stocking level is moderate. |
| 195 | 42220 - Natural Jack Pine | Sapling Well | 26.4 | 23 | Immature | The stand was harvested in 1993. The crown closure is closer to 75%. The stand is a mixture of dense regeneration and open areas. It is also a mixture of uplands and lowlands. The jack pine in the stand is heavily galled and very branchy. Other species in the stand are maples, oaks and red pines. |
| 196 | 4130 - Aspen | Sapling Well | 13.9 | 15 | Immature | The stand was harvested in 2003. The densest parts of the stand is a ridge of aspen. As you go to the east and west of the ridge it changes from well stocked aspen to a medium stocking of jack pines and oaks. The stand also gets noticeably wetter. |
| 197 | 42220 - Natural Jack Pine | Sawtimber Well | 4.1 | 86 | 51-80 | The stand was harvested in 2003 leaving the red pines. The regeneration in the stand is at a medium stocking in the open areas of the stand. The areas with heavier crown closure are poorly stocked. |

| s t | Gladwir | Gladwin Mgt. Unit | | | Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-------------|--|----------------------|-------|--------------|----------------------------|--|
| a n d | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 198 | 6126 - Lowland Jack Pine | Sapling Medium | 12.0 | 15 | Immature | The terrain is hummocky with pockets of leather leaf as well as pockets of bracken fern. The stand was harvested in 2003. The crown closure is between 60 and 70%. The stand filled in fairly well with aspens, oaks, jack pines, red pines, white pines and tamaracks. |
| 199 | 42220 - Natural Jack Pine | Poletimber Well | 5.8 | 86 | 111-140 | This is an area of jack pine that wasn't cut with the rest of stand 198. The terrain is hummocky with some wet depressions. There are canopy gaps. The gaps are filling in with maples, jack pines, red pines, and tamaracks. The north end of the stand is heavy to red pines. |
| 201 | 4199 - Other Mixed Upland Deciduous | Poletimber Medium | 38.7 | 36 | 1-50 | This stand is a hodgepodge of aspens and swamp hardwoods. The aspens in the stand are mainly quaking aspen and there are some inclusions of wet ground. Overall, the stand is just coming into poles. The terrain is undulating but mostly uplands with inclusions of lowlands. |
| 202 | 6117 - Lowland Deciduous, Mixed Coniferous | Sapling Poor | 15.1 | 26 | Immature | The stand is low and wet. It is mainly a medium stocked swamp hardwoods swale with birch, white pine, jack pine, tamarack and oak. The ground cover is mainly tag alder and willow. The stand was harvested in 1993. The central portion of the stand is heavy to lowland shrub and has a low stocking level while the perimeter is fully stocked. The growth appears to be slow indicating it has a low site index. |
| 205 | 42220 - Natural Jack Pine | Poletimber Medium | 11.1 | 33 | 1-50 | This stand is sparse but overall it is medium stocked. It is a mixture of oaks, maples and aspens and it is just becoming a pole stand. There is some regeneration but it is not extensive. The terrain is hummocky with lots of wet pockets. Some of the oaks and red pines were left at the time of the harvest. |
| 206 | 4199 - Other Mixed Upland Deciduous | Poletimber Medium | 4.6 | 55 | 51-80 | The stand has a trace of bigtooth, birch, black cherry, white pine, and white spruce. |
| 207 | 42221 - Natural Jack Pine, Mixed Deciduous | Poletimber Medium | 7.0 | 55 | 51-80 | The stand has a ground cover of leather leaf, sheep laurel, and fern. The jack pine in the stand is variable going from poles to saplings. |
| 208 | 6126 - Lowland Jack Pine | Sapling Well | 49.6 | 23 | Immature | 25-50% of north 1/3 of stand has gall rust. The ground cover is a dense layer of leatherleaf, blueberry, and other herbs. There is virtually no subcanopy. Overall the stand looks good. However, there are some small openings and the overall density is still good. Harvested 1993 |
| 210 | 42220 - Natural Jack Pine | Sapling Medium | 6.2 | 27 | Immature | The stand appears to be seeding in from stand 116. The size of the jack pine ranges from small seedlings to medium poles. The pole size jack pines are scattered. The density in the stand is also variable and goes from medium stocked to well stocked. The southern end of the stand is heavy to jack pine, but this goes to jack pine/oak in the central part, and to jack pine/aspen/oak in the north end of the stand. In addition, this area like much of the compartment south of Mosquito Alley Truck Trail was part of a rotational burn in the 80s. |
| 211 | 4130 - Aspen | Poletimber Well | 2.2 | 17 | 81-110 | This is a slight upland stand against a private subdivision. |

| S t a n d | Gladwin Mgt. Unit | | | Report 7 | - Forested | Stands Compartment: 68 Year of Entry: 2019 |
|-----------------------|--------------------------------|----------------------|-------|--------------|-------------|--|
| | Level 4 Cover Type | Size Density | Acres | Stand Age | BA Range | General Comments: |
| 212 | 6139 - Mixed Lowland Forest | Sapling Well | 4.8 | 25 | 51-80 | The dominate age was updated in 2015. The terrain is hummocky. There are areas of leatherleaf. |
| 213 | 42120 - Planted Jack Pine | Sapling Well | 6.5 | 31 | 1-50 | The dominate age was updated in 2015. The terrain is hummocky. The stand is moving into poles. The stand is barely upland. In addition, there is a significant portion of the stand that is seasonally wet. Therefore, the stand could not be treated in the spring through early summer. |
| 215 | 6113 - Lowland Maple | Poletimber Well | 24.4 | 41 | 81-110 | The stand is a wet stand of swamp hardwoods. There are a few upland knobs but they are small. The ash in the stand is dying from EAB. However, there are still a couple of live ash in the stand. |
| 216 | 6112 - Lowland Aspen | Poletimber Well | 2.8 | 34 | 51-80 | This stand is the flood plain of the Molasses River. The flood plain is bordered by steep banks, which are tiered. The aspen in the stand is way over mature. In addition, along the river there are several areas of alluvial shrubs. |
| 219 | 4130 - Aspen | Sapling Well | 7.8 | 10 | Immature | The stand was harvested in 2007. The regeneration is coming in well and it is heavy to aspen. There are some low areas where the crown closure drops to below 50% but much of the stand is over 75%. There are drainages going through the stand. |
| 220 | 6139 - Mixed Lowland Forest | Poletimber Medium | 20.1 | 31 | Immature | The east end of the stand is a mixture of jack pine, trembling aspen, and oak with a heavy component of lowland shrub. The overall stocking is medium to well. This area was part of a rotational burn in the past. The terrain is hummocky and the ground cover goes from bracken fern/blueberry to sheep laurel/blueberry/leatherleaf. In addition, the regeneration is patchy and goes from well stocked to non-stocked from aspen to jack pine. Most of the aspen is in the south half of the stand, while jack pine is heavier in the north half. The diameter of the trees is also |

51-80

1-50

6126 - Lowland Jack

Pine

4310 - Pine, Oak Mix

221

222

Sapling Well

Poletimber

Well

7.7

7.3

15

30

variable going from 1 inch to 5 inches at DBH.

The dominate age was updated in 2015. It looks like the stand was harvested around 1998 and then planted around 2000

according to the aerial imagery. So, the stand is around 15 years old. The terrain is hummocky. The stand is heavily galled.

The stand is a ridge that runs between low wet areas.



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------------|-------|-----------------|--|
| 2 | 6220 - Alder/willow | 8.7 | No | The stand is very wet. It is mainly tag alder with a sparse canopy of maple and aspen. The canopy is between 15 and 20%. The ash that was in the stand is dead and coming down. The groundcover is swamp grass and sensitive fern. |
| 4 | 3303 - Mixed Low Density Trees | 3.6 | No | The stand is an old white pine stump field. The terrain is hummocky but dry. The crown closure is between 15 and 25% so it is not forested. Jack pine, white pine and some oak is seeding in from the surrounding stands. |
| 8 | 6229 - Mixed lowland shrub | 10.1 | No | The ash in the stand is dead and most of them have come down. The stand is now mainly tag alder, dogwood, and other lowland shrubs over marsh grass. |
| 13 | 6225 - Bog | 1.1 | No | The stand is in a swale. It is heavy to leatherleaf and the terrain is hummocky. |
| 26 | 6225 - Bog | 35.4 | No | This stand is mainly a leatherleaf bog. There are portions of the stand that are marsh grass. There are some pockets of lowland shrubs and scattered trees along the east side. |
| 30 | 6233 - Wet Meadow | 6.7 | No | The stand is in a well-defined depression. The ground cover is mainly marsh grass with some areas of water and sparse low reeds. |
| 31 | 6224 - Treed Bog | 5.2 | No | The stand is a treed bog of leatherleaf and marsh grasses with scattered jack pine mainly, with some isolated white pine and red pine. |
| 33 | 6233 - Wet Meadow | 10.6 | No | The stand is a mix of marsh grass and leather leaf. |
| 34 | 6224 - Treed Bog | 2.2 | No | This is mainly a bog with some red, jack, and white pine scattered in it. There are some hardwoods on the western edge. |
| 36 | 6224 - Treed Bog | 1.8 | No | The stand is in a depression and it is very hummocky. The white pines in the stand are open grown. This has led to the pines being short and having a very poor form. They have heavy branches all the way to the ground. |
| 38 | 6224 - Treed Bog | 9.3 | No | The crown closure is between 15 and 25%. The trees in the bog are concentrated through the center of the stand. The terrain is very hummocky and wet. |
| 39 | 3302 - Low Density Conifer Trees | 11.5 | | The stand was salvaged in 1996 having the dead oak removed. It had a second harvest in 2010 as a shelterwood-seed tree harvest retaining 20-30 BA of oak and pine. The regeneration is moderate and it is mainly pine with some oak. There is a knob at the west end that is heavy to jack pine. |
| 41 | 6220 - Alder/willow | 30.9 | No | The stand is mainly a lowland shrub type with some aspen and pines scattered in it. |
| 48 | 6224 - Treed Bog | 5.1 | No | The stand is a leather leaf bog with scattered red, white, and jack pines. The trees are in patches where the ground is a little dryer. |
| 53 | 122 - Road/Parking Lot | 5.3 | No | This is M-61 ROW from the center line of the road to the north. |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------------|-------|-----------------|--|
| 61 | 6224 - Treed Bog | 5.1 | No | The stand is in a depression. The north end has the majority of the trees. The ground cover is leather leaf. |
| 69 | 6224 - Treed Bog | 2.1 | No | The stand is a leatherleaf depression. There are some scattered pockets of pines. The crown closure is between 15 and 25%. |
| 95 | 310 - Herbaceous Openland | 1.7 | No | This stand is an old landing that was used when stand 93 was cut. It has come back to poverty grass, blackberry, bracken fern, sweet fern, and spotted knapweed. |
| 97 | 6229 - Mixed lowland shrub | 5.5 | No | This drainage is predominantly an L-Type. The edges of the stand have some swamp hardwoods present. These hardwoods are mainly ash with some red maple. The ash is dead and coming down. |
| 110 | 6229 - Mixed lowland shrub | 4.7 | No | This stand is very wet and it is mainly a lowland shrub type with pockets of leatherleaf. There is a small pocket of trees in the stand. |
| 112 | 6229 - Mixed lowland shrub | 23.2 | No | This stand is a lowland shrub type with some areas of maple and ash. The ash is now dead and starting to come down. These pockets are scattered so the stand is non-forested. The stand also has a drainage running through it. This flow drains many of the stand south of the Mosquito Alley Truck Trail. |
| 115 | 6229 - Mixed lowland shrub | 13.0 | No | The stand is mainly alder over marsh grass. There are some birch trees scattered in the stand. |
| 121 | 6229 - Mixed lowland shrub | 5.9 | No | The stand is in a depression. It is mainly lowland shrubs with some scattered swamp hardwoods and pines. |
| 122 | 3302 - Low Density Conifer Trees | 12.6 | | The terrain in the stand is hummocky. The ground cover is sheep laurel, blueberry and some leatherleaf. There are some pockets of very wet ground. The stand looks like it dries out in late summer. The stand was harvested as a clear cut in 2013. When it was harvested, the branches were left to provide seed to the stand. This was done because of the moist ground and because the jack pines had semi-serotinous cones. The stand has regenerated fairly-well and it looks to be fully stocked. |
| 123 | 500 - Water | 5.0 | No | These stands appear to be old beaver floodings. The water level appears to have gone down substantially since the 2010 leaf off imagery. |
| 126 | 6224 - Treed Bog | 2.0 | No | This stand is in a slight depression and it is next to stand 111. It has a ground cover of leatherleaf with some widely-scattered oak, jack pine, white pine and trembling aspen in it. |
| 130 | 6229 - Mixed lowland shrub | 3.5 | No | This is a non-forested part of stand 143. The stand is heavy to tag alder and Michigan holly. There are some scattered trees mainly swamp hardwood |
| 137 | 3303 - Mixed Low Density Trees | 30.0 | | The stand has been clearcut in 2013. It was burned and trenched in 2016. It has not yet been planted to red pine. Planting should occur in the spring of 2017. When harvesting and planting is done, the stand is expected to be a mixture of planted red pine, and natural jack pine and oak. The retention for the stand was set up to help with visual and protect traditional hunting camps. |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|----------------------------------|-------|-----------------|--|
| 138 | 330 - Low-Density Trees | 4.7 | | The stand was clearcut in 2013. It was burned and most of the stand was trenched in 2016. It has not yet been planted to red pine. Planting should occur in the spring of 2017. When harvesting and planting is done, the stand is expected to be a mixture of planted red pine, and natural jack pine, aspen, and oak. |
| 148 | 6224 - Treed Bog | 3.3 | No | This stand is mainly a medium stocked jack pine over blueberry, leather leaf, and bracken fern. There are areas of both J1 and J3. The trees are squat and open grown. Red pine and oak are seeding in on the dryer ground. The red pine is putting on 1.5 to 2 feet of growth a year. There are also some poles present in the south end of the stand. |
| 153 | 6233 - Wet Meadow | 84.2 | No | The stand has seen some hydrology changes. It looks like it was a lot wetter in the past from the older aerial imagery. It's now more of a wet meadow with pockets of lowland shrubs and pockets of non-forested wetlands. |
| 154 | 500 - Water | 11.9 | No | The stand looks like a beaver flooding. The dam is still intact and holding water. The beaver lodge looks like it was made part of the dam. |
| 156 | 3303 - Mixed Low Density Trees | 77.6 | No | The stand is a matrix of uplands and lowlands. The uplands make up about 55% of the stand. The trees are in patches of aspen clones and knobs of jack pine. Much of the aspen is mature and showing signs of declining. Pine trees are seeding in and are mainly jack pine. However, there are some red and white seedlings coming into the stand. There are also some hybrid oaks scattered throughout the stand. |
| 157 | 3302 - Low Density Conifer Trees | 6.7 | No | The stand is on a slight-ridge. The central portions of it is open and is more of an upland herbaceous. There is a fair amount of jack pine seeding in as well as some scattered oak. |
| 159 | 122 - Road/Parking Lot | 1.5 | No | M-61 |
| 162 | 6229 - Mixed lowland shrub | 50.2 | No | This stand is a hodge-podge of dense pockets of trees and shrub fields. The overall crown closure is between 15 and 25%. The stand is a mix of uplands and lowlands with the lowlands being the majority. The terrain is hummocky. The oak regeneration is heaviest in the eastern portion of the stand and jack pine in the western portion. |
| 168 | 6220 - Alder/willow | 67.0 | No | This stand has very little in the line of any trees in it. The stand is mainly tag alder and dogwood. |
| 172 | 6224 - Treed Bog | 7.3 | No | This stand has some aspen, pine, and mixed oak. The aspen is poor quality trembling aspen. The overall crown closure is between 15% and 25%. The ground cover is mainly leather leaf and blueberry. |
| 177 | 330 - Low-Density Trees | 16.3 | | The stand was harvested in 2011 in the Fish Creek North sale, sale number 73-006-06-01. It is starting to regenerate. However, the regeneration is sparse and has heavy deer browse. The browse level is around 75% of all stems. The east end is moderately stocked the west end is poorly stocked. |
| 185 | 6225 - Bog | 1.6 | No | The stand is mainly leather leaf and blueberry with some scattered red and jack pine. |



| Stand | Cover Type | Acres | Managed Site | General Comments: |
|-------|------------------------------------|-------|-----------------|---|
| 200 | 622 - Lowland Shrub | 3.6 | No | The stand is an L-Type with some swamp hardwoods. The hardwoods are mainly birch and maple which are heaviest along the perimeter. |
| 203 | 310 - Herbaceous Openland | 7.1 | | The stand is on a knob that's isolated by low wet ground. It was harvested in 2013 as a clear cut. The stand is trying to regenerate. However, both maple and oak are heavily browsed. |
| 204 | 6229 - Mixed lowland shrub | 4.7 | No | This drainage flows into Fish Creek. The stand is mainly leather leaf with some swamp hardwoods and conifers scattered throughout the stand. |
| 209 | 3301 - Low Density Deciduous Trees | 9.1 | | The stand was harvested in 2011. At the current time the oak regeneration is thick but not tall enough to be called established. It is expected to become established in time and be a fully stocked stand. |
| 214 | 122 - Road/Parking Lot | 15.2 | No | M-61 |
| 217 | 6220 - Alder/willow | 22.0 | No | The stand has a crown closure around 20%. The ash in the stand is dead and coming down. The death of the ash is what took the crown closure below 25%. The understory is thick to tag alder and Michigan holly. Overall, the stand is too wet to harvest. |